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WUHAN IRON & STEEL CO., LTD.

Cold-rolled Grain-oriented Electrical Steel

武钢有限
冷轧取向电工钢

www.baosteel.com

宝山钢铁股份有限公司
BAOSHAN IRON & STEEL CO., LTD.

电工钢通常是指冷轧电工钢，分晶粒取向电工钢和晶粒无取向电工钢两大类。取向电工钢易磁化晶粒方向沿轧制方向分布，轧制方向具有高磁感、低铁损及低的磁致伸缩等优良特性，同时还可通过细化磁畴的技术处理，获得更低的铁损，广泛应用于变压器行业；无取向电工钢晶粒方向随机分布，电磁性能各向均匀，广泛应用于电机行业。

本手册综合介绍了武钢有限取向电工钢的品种、牌号、规格、应用范围、力学性能和电磁性能，并提供各牌号的电磁性能数据和曲线图，作为用户使用武钢有限电工钢时重要的参考工具书，有利于充分利用武钢有限电工钢产品特性，设计、制造出更加优良的电气产品。

Electrical steel, usually referring to cold rolled electrical steel, can be divided into two major categories including grain oriented electrical steel and non-oriented electrical steel. Grain oriented electrical steel, with its easy magnetization direction parallel to the rolling direction, has excellent magnetic properties in this direction including low core loss, high permeability and low magnetostriction and is widely used in the transformer industry. Further it can obtain lower core loss by domain refinement treatment. Meanwhile non-oriented electrical steel, featured by random distribution of grain orientation and magnetic isotropy, is widely applicable to the motor industry.

This brochure presents the overview of Wuhan Iron & Steel Co.,Ltd. grain oriented electrical steel in terms of grade, specification, application, mechanical properties, magnetic properties, magnetization data and curves. The customer can take this brochure as an important reference handbook when using our grain oriented electrical steel products. We believe it will be helpful for the customer to take advantage of the characteristics of our products so as to design and manufacture more excellent electric and electrical products.

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China's Major R&D and Production Base for Iron and Steel

中国重要的钢铁生产研发基地

冷轧电工钢
Cold Rolled Electrical Steel

汽车板
Automotive Sheet Steel

高性能工程结构用钢
High-performance Engineering Structural Steel

精品长材
Premium Long Product Steel

宝钢股份武汉钢铁有限公司

Wuhan Iron & Steel Co., Ltd., subsidiary of Baoshan Iron & Steel Co., Ltd.

宝钢股份武汉钢铁有限公司于2017年3月2日成立，是宝钢集团、武钢集团联合重组后，两家央企的核心资产宝钢股份、武钢股份启动换股吸收合并成立的子公司 ，与上海宝山、南京梅山、湛江东山一起，成为宝钢股份的四大钢铁基地。

公司厂区坐落在武汉市东部、长江南岸，用地面积21.17平方公里，厂区道路总长67公里，厂界31公里，现有职工2.5万余名。

公司拥有炼焦、炼铁、炼钢、轧钢及配套公辅设施等一整套先进的全流程钢铁生产工艺设备，始终专注于冶金产品及副产品、钢铁延伸产品制造及冶金产品的技术开发。

钢铁产品主要有线材、热轧型钢（含热轧重轨）、热轧卷板、热轧中厚板、冷轧卷板、镀锌板（含电镀锌）、镀锡板、冷轧取向和无取向电工钢、彩涂钢板等各类钢铁品种。

产品通过遍布全球的营销网络，广泛应用于汽车、家电、石油化工、机械制造、能源交通、金属制品、航天航空、核电、电子仪表等行业。

公司主体装备达到了国际一流水平，形成了以冷轧电工钢、汽车用钢、高性能工程结构用钢、精品长材四大战略产品为重点的一批名牌产品。

Following up with the reliance and restructuring of Shanghai Baosteel Group Corporation and Wuhan Iron & Steel Group Corporation, Wuhan Iron & Steel Co., Ltd., subsidiary of Baoshan Iron & Steel Co., Ltd. was established on March 2, 2017 after Baoshan Iron & Steel Co., Ltd. merged with Wuhan Iron & Steel Co., Ltd. through share absorption, and become one of the four major production bases together with Shanghai Baoshan Steel Plant, Nanjing Meishan Steel Plant and Zhanjiang Dongshan Steel Plant.

Located in the east of Wuhan city and to the south of Yangtze river, Wuhan Qishan steel plant has an area of 21.17 square kilometers. The plant road has a total length of 67 kilometers and the boundary of the plant is 31 kilometers. It has about 25 thousand employees so far.

Owning the complete iron and steel production process and facilities including coking, iron-making, steel-making, steel-rolling and supporting utility facilities, the company is dedicated to the production of metallurgical products and by products, further processing of steel products and R & D of metallurgical products.

Steel products mainly include wire rod, hot-rolled section (including hot rolled heavy rail), hot-rolled coil, hot rolled plate, cold rolled coils and sheets, galvanized sheet (including electro- galvanized sheet), tin plate, cold rolled grain oriented electrical steel, cold rolled non-oriented electrical steel, prepainted sheet, etc.

Through the marketing and sales network across the world, the products are widely used in automotive, home appliance, petrochemical industry, machinery manufacturing, energy, transportation, metal products, aerospace, nuclear power, electronic instrumentation and other industries.

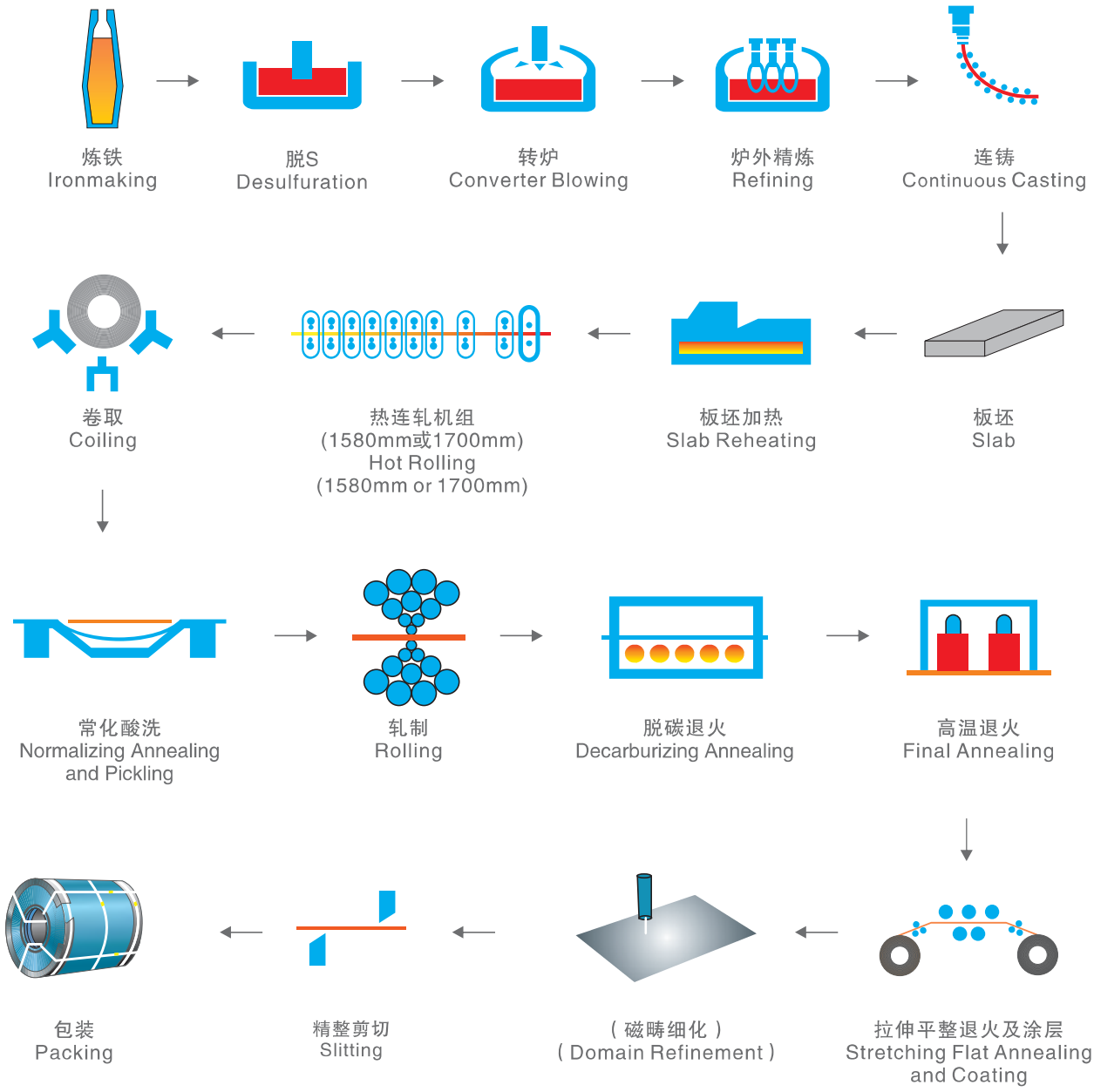
As the main equipment and facilities have reached the international first-class level, a number of products under the four strategic categories including cold rolled electrical steel, automotive steel, high-performance engineering structural steel and long product have gained the award of China Brand product.

世界领先水平的冷轧电工钢生产线
World Leading Cold Rolled Electrical Steel Production Line

武钢有限拥有世界一流的从矿石冶炼到热轧、冷轧、退火、表面处理以及精包装等完整工艺的专业化电工钢生产线；自上世纪七十年代以来，通过引进、消化、吸收和不断创新，不仅熟练掌握冷轧电工钢核心制造技术，而且成功申请了大量制造专利；开发出多项具有自主知识产权的高端电工钢产品，实现了主流牌号全覆盖。

Wuhan Iron & Steel Co.,Ltd. has the complete production process and facilities for the production of cold rolled electrical steel from ore melting to hot-rolling, cold-rolling, annealing, surface processing and packing. Since 1970s by means of introduction, absorption and continuous innovation, Wuhan Iron & Steel Co.,Ltd. has mastered the core technology for the production of cold rolled electrical steel. Further Wuhan Iron & Steel Co.,Ltd. has successfully applied for a number of patents, has developed a series of high grade products with independent intellectual properties, and can produce all the prevailing grades.

工艺流程
Production Process



发展历程
Development History

武钢是国内最早引进并掌握冷轧电工钢生产技术的钢铁企业，历经发展，共建立4个生产厂，现具有年产取向电工钢42万吨，无取向电工钢120万吨，总量达162万吨的电工钢生产能力，是全球单体产量最大的电工钢生产基地。

■ 1978年

引进冷轧电工钢生产线投产，设计年产能7万吨，开创了我国冷轧电工钢的生产历史。

■ 1996年

一期扩建完成，总产能26.5万吨，开始掌握取向电工钢生产技术，取向电工钢产能7万吨。

■ 1998年

二期扩建完成，总产能40万吨，其中取向电工钢12万吨。

■ 2006年

二分厂建成投产，总产能122万吨，其中取向电工钢28万吨。

■ 2007年

“国家硅钢工程技术研究中心”落户武钢，助力电工钢技术研发。

■ 2008年

高磁感取向电工钢首次成功应用于出口500kV大型变压器，实现出口大型变压器国产化。

■ 2009年

三分厂建成投产，总产能178万吨，其中取向电工钢44万吨，以生产高磁感取向电工钢和极薄规格为主。

■ 2010年

3月，三峡工程500kV超高压变压器用武钢有限HiB钢通过有关专家组的技术评审，实现水电工程大型变压器国产化。

■ 2012年

四分厂建成投产，总产能190万吨，其中取向电工钢56万吨，以生产低温高磁感电工钢为主。

10月，高端取向电工钢成功应用于云南太安、向家坝、溪洛渡等项目的500kV大变压器和出口765kV级电抗器，实现出口大型电抗器国产化。

■ 2013年

高端取向电工钢全面进入特高压大容量电力变压器制造领域。

■ 2014年

高端取向电工钢成功应用于出口意大利黑山±400kV直流换流变项目。

高端取向电工钢成功应用于“浙北—福州”1000kV特高压变压器，实现特高压变压器国产化。

■ 2015年

与西变在“酒泉—湖南”±400kV直流项目上达成合作，实现直流变压器国产化。

0.35mm规格取向电工钢成功应用于大型火电、核电发电机。

■ 2016年

高端取向电工钢成功应用于国网特高压“榆横—潍坊”交流项目1000kV变压器。

高端取向电工钢成功应用于巴西美丽山特高压直流工程项目±800kV换流变压器，实现±800kV级直流变压器国产化。

■ 2017年

1月，淘汰一般取向电工钢产能，实现全HiB化生产，取向电工钢年产能42万吨。

取向电工钢成功应用于中广核红沿河核电工程项目220kV厂变，实现核电项目用钢国产化。

0.23mm高端取向电工钢成功应用于神华胜利电厂1000kV特高压变压器项目，实现高端取向电工钢0.30mm、0.27mm、0.23mm三种主流规格产品全部成功应用于特高压变压器。

Wuhan Iron & Steel Co.,Ltd. is the first steel producer in China introducing and mastering the production technology of cold rolled electrical steel. Through years of development, it has set up four plants and become the production base for cold rolled electrical steel with the highest annual output worldwide. Currently it has the annual production capacity of 1.62 million metric tons of electrical steel, among which that of grain oriented electrical steel is 0.42 million metric tons and that of non-oriented electrical steel is 1.2 million metric tons.

1978
The cold rolled electrical steel production line was introduced and put into operation with the designed annual capacity of 70 thousand metric tons, marking the beginning of the production of cold rolled electrical steel in China.

1996
The 1st phase expansion project for No. 1 electrical steel plant was completed. The total annual output had increased to 265 thousand metric tons, among which that of grain oriented electrical steel was 70 thousand metric tons. The company started to master the production technology of grain oriented electrical steel.

1998
The 2nd phase expansion project for No. 1 electrical steel plant was completed. The total annual output had increased to 400 thousand metric tons, among which that of grain oriented electrical steel was 120 thousand metric tons.

2006
No. 2 electrical steel plant was set up and put into operation. The total annual output had increased to 1.22 million metric tons, among which that of grain oriented electrical steel was 280 thousand metric tons.

2007
The National Engineering Research Center for Silicon Steel was settled down at Wuhan Iron & Steel Co.,Ltd., facilitating the research and development of electrical steel.

2008
High permeability grain oriented electrical steel was successfully applied for the 1st time to 500kV large scale transformer to be exported, and the import substitution of large scale transformer for export use was realized.

2009
No. 3 electrical steel plant, dedicated to the production of high permeability grade and thinner gauge grain oriented electrical steel, was set up and put into operation. The total annual output had increased to 1.78 million metric tons, among which that of grain oriented electrical steel was 440 thousand metric tons.

2010
As the high permeability grain oriented electrical steel for 500kV ultra high voltage transformer for Three Gorge project was approved by the experts group in March, the import substitution of large scale transformer for hydropower project was realized.

2012
No. 4 electrical steel plant, dedicated to the production of low temperature high permeability grain oriented electrical steel, was set up and put into operation. The total annual output had increased to 1.9 million metric tons, among which that of grain oriented electrical steel was 56 thousand metric tons.

In October High grade grain oriented electrical steel was successfully applied to 500kV large scale transformers and 765 kV reactor for a number of project including Yunnan Taian, Xiangjiaba and realized the import substitution of large scale reactors for export use.

2013
High grade grain oriented electrical steel was widely applied to the manufacturing of super high voltage and big capacity power transformers.

2014
High grade grain oriented electrical steel was successfully applied to ±400kV DC converter transformer project to be exported to Italy Montenegro.

High grade grain oriented electrical steel was successfully applied to 1000kV super high voltage transformer of “Zhebei – Fuzhou” project and realized the import substitution of ultra high voltage transformers.

2015
Corporation agreement was made with Xi'an Transformer Factory for “Jiuquan – hunan” ±400kV DC transformer project so as to realize the import substitution of DC transformer.

Grain oriented electrical steel with the nominal thickness of 0.35mm was successfully applied to large scale thermal power and nuclear power generators.

2016
High grade grain oriented electrical steel was successfully applied to 1000kV AC transformer of national power grid super high voltage “Yuheng – Weifang” AC transformer project.

High grade grain oriented electrical steel was successfully applied to ±800kV DC converter transformer of Brazil Beauty Mountain super high voltage DC converter transformer project so as to realize the import substitution of ±800kV DC converter transformer.

2017
As the elimination of backward production capacity was completed in January, the company only produced high permeability grain oriented electrical steel instead of conventional grain oriented electrical steel. The annual output of grain oriented electrical steel was decreased to 42 thousand metric tons.

High grade grain oriented electrical steel was successfully applied to 220kV transformer of Zhongguanghe Hongyanhe nuclear power project to realize the import substitution of grain oriented electrical steel for nuclear power project.

High grade grain oriented electrical steel with the nominal thickness of 0.23mm was successfully applied to Shenhua Shengli power plant 1000kV super high voltage transformer project, marking the successful application of all high grade grain oriented electrical steel with the nominal thickness of 0.30mm, 0.27mm and 0.23mm to super high voltage transformers.

产品特点
Characteristics

电磁性能
铁损低，磁感高；产品应用性能优良。

厚度精度
纵、横向厚度差小，叠装系数高。

加工性能
容易剪切，切片尺寸精度高。

绝缘涂层
色泽均匀、绝缘性好、附着性强、耐热性能优良、经久耐蚀。有多种绝缘涂层可供选择，经专业检测机构检测，有害物质含量符合包括欧盟RoHS及REACH在内的国内外现有各种环保法规的要求。

Magnetic properties
The magnetic properties of the product is featured by its low core loss, high permeability and excellent application performance.

Thickness tolerance
The good thickness tolerance is characterized by small difference in thickness in a direction parallel to the direction of rolling, small difference in thickness in a direction perpendicular to the direction of rolling, and high lamination factor.

Processing property
The product is suitable for punching and cutting with excellent dimensional tolerance.

Insulation coating
The insulation coating has small color deviation, good adhesiveness and excellent resistance to heating and corrosion with high insulation coating resistance. There are several types of insulation coating available for production. According to the test results performed by the professional inspection organizations, the contents of hazardous substances comply with all the prevailing international and domestic environment protection laws and regulations including EU RoHS and REACH regulations.

用户可根据层间电阻、耐蚀性、耐热性、冲片性以及其他特性，选择符合使用要求的表面绝缘涂层。

Different insulation coatings are available to meet a range of customer requirements according to interlaminar resistance, corrosion resistance, punchability, weldability and so on.

涂层代号 Coating code	T2	H	W
组分 Component	无机 Inorganic	无机(不含 Cr) Inorganic（not including Cr）	无底层 No-glass-film product
叠装系数 Lamination factor	高 High	高 High	——
层间电阻 Interlaminar resistance	大 High	大 High	很小 Very low
附着性 Attachment	好 Good	好 Good	——
耐蚀性 Corrosion resistance	很好 Very good	很好 Very good	——
耐热性 Heat-resistance	在非氧化性环境下，可耐 820℃消除应力退火 Withstands stress-relief annealing ＜ 820 ℃ under inert gas	在非氧化性环境下，可耐 820℃消除应力退火 Withstands stress-relief annealing ＜ 820 ℃ under inert gas	——
冲片性 Punchability	好 Good	好 Good	用于极薄材生产 For the production of extremely thin material

推荐用途
Recommended Applications

品种 Varieties	普通型 Conventional	高磁感型 High induction	磁畴细化高磁感型 Domain refined high induction
大型电机 Large motors	★	★	
大型变压器 Large transformers	★	★	★
中小型变压器 Medium and small transformers	★	★	★
分配变压器 Distributing transformers	★	★	
调压器 Voltage regulator	★	★	
电抗器及磁放大器 Reactor and magnetic amplifier	★	★	★
中频变压器 IF transformer		★	
互感器 Mutual inductor	★	★	
电视机变压器 TV transformer	★	★	
收音机变压器 Radio transformer	★	★	
无线电广播变压器 Radio broadcast transformer		★	

牌号表示方法
Product Designation

钢的牌号是按照下列给出的次序组成：

1） 以mm为单位，钢板公称厚度的100倍。

2） 特征字符：

Q：取向的“取”字汉语拼音首字母；

G：高磁感“高”字汉语拼音首字母；

RK：激光刻痕非耐热磁畴细化产品。

3） 铁损值的100倍（如无特殊说明，检测条件为$P_{1.7/50}$）。

The steel grade comprises the following in the order given:

1) one hundred times the nominal thickness of the material, in millimeters;

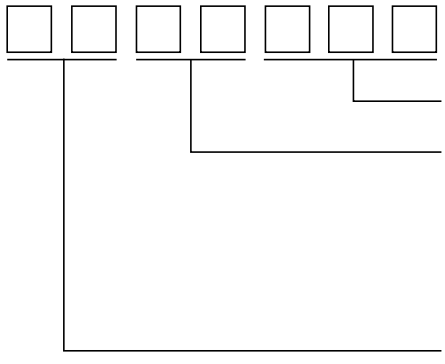
2) characteristic letter:

Q: capital letter of Chinese Pinyin “Qu”;

G: capital letter of Chinese Pinyin “Gao”;

RK: domain refined grades by laser scribing, to be deteriorated when subjected to heat treatment.

3) one hundred times the maximum value of specific total loss in watts per kilogram at 1.7 T and 50 Hz, unless otherwise specified.



铁损值的100倍	One hundred times the maximum value of specific total loss
取向电工钢类型：	Classification of grain oriented electrical steel:
Q：普通型	Q for conventional grades
QG：高磁感型	QG for high permeability grades
RK：高磁感磁畴细化型	RK for high permeability grades, domain refined
公称厚度的100倍	One hundred times the nominal thickness

示例

30Q120

公称厚度为0.30mm、最大铁损为1.20W/kg的普通级冷轧取向电工钢。

30QG120

公称厚度为0.30mm、最大铁损为1.20W/kg的高磁感冷轧取向电工钢。

27RK090

公称厚度为0.27mm、最大铁损为0.90W/kg的激光刻痕磁畴细化高磁感冷轧取向电工钢。

Examples:

Conventional grain oriented electrical steel with the maximum specific total loss of 1.2 W/kg at 1.7 T and 50 Hz and a nominal thickness of 0.30 mm shall be designated as 30Q120.

High permeability grain oriented electrical steel with the maximum specific total loss of 1.2 W/kg at 1.7 T and 50 Hz and a nominal thickness of 0.30 mm shall be designated as 30QG120.

High permeability grain oriented electrical steel, domain refined by laser scribing, with the maximum specific total loss of 0.90 W/kg at 1.7 T and 50 Hz and a nominal thickness of 0.27 mm shall be designated as 27RK090.

产品规格

Specifications

产品尺寸 Standard Dimensions of Products

可供产品厚度 Available thickness	可供产品宽度 Available width range	内径 Inside diameter
mm	mm	mm
0.18、0.20	850-1200	508 ± 10
0.23、0.27、0.30、0.35	850-1200	508 ± 10

尺寸及板形公差 Dimensional and Shape Tolerances

公称厚度 Nominal thickness	公称厚度允许偏差 Nominal thickness tolerance	纵向厚度差 Longitudinal thickness tolerance	横向厚度差 Traverse thickness tolerance	宽度允许偏差 Width tolerance	不平度 Flatness	2m 内镰刀弯 Camber within 2m
mm	mm	mm	mm	mm	%	mm
0.18	± 0.015	≤0.020	≤0.010	0~+1	≤1.5	≤0.9
0.20	± 0.015					
0.23	± 0.020	≤0.025	≤0.015			
0.27	± 0.025					
0.30	± 0.025					
0.35	± 0.025					

注：a.横向厚度差是指钢板中心与距边部15mm的厚度差。

b.纵向厚度差是在任意2m长度的钢板上，沿长度方向（平行于轧制方向）测得的厚度最大值与厚度最小值之差。

c.对于有特殊要求的用户，武钢可以标准+α供货。

Note: a. Traverse thickness deviation refers to the thickness difference between the sheet center and 15mm from the edge.

b. The longitudinal thickness difference is the difference of the measured maximum thickness and the minimum hickness in the longitudinal direction (parallel to the rolling direction) at an arbitrary 2m length of steel on steel.

c. Please consult us if you have special requirements.

力学性能典型值
Typical Mechanical Properties

类型 Type	公称厚度 Nominal thickness mm	抗拉强度 R_m Tensile strength N/mm²		伸长率 Elongation %	硬度 HV5 Hardness	弯曲次数 Number of bends	叠装系数 Lamination factor %
		L	C	L			
普通型 Convertional	0.23	347	422	6	177	25	97.2
	0.27	352	427	8	180	25	97.5
	0.30	349	424	10	180	22	98.0
	0.35	364	435	9	180	22	98.5
高磁感型 High induction	0.18	375	445	8	177	25	96.5
	0.20	374	445	8	177	25	97.0
	0.23	347	422	6	177	25	97.2
	0.27	357	441	10	178	20	97.5
	0.30	347	431	8	179	15	98.0
磁畴细化高磁感型 Domamin refined high induction	0.18	368	417	13	177	22	96.5
	0.20	367	433	13	177	22	97.0
	0.23	342	417	6	177	20	97.2
	0.27	352	426	8	176	17	97.5
	0.30	336	408	9	177	19	98.0

注：a.检测依据GB/T228、GB/T4340.1、GB/T2522。
b.以上为典型值，仅作参考不作保证。
c.L—平行于轧制方向，C—垂直于轧制方向。

Note: a. Testing standards are GB/T228、GB/T 4340.1、GB/T2522.
b. Above properties are typical values for reference only and not as a guarantee.
c. L—Parallel to the rolling direction. C—perpendicular to the rolling direction.

电磁性能标准值
Standard Magnetic Properties

类型 Type	牌号 Grade	公称厚度 Nominal thickness	理论密度 Theoretical density	最大铁损 $P_{1.7/50}$ Max.Core loss	最小磁感 B_{800} Min. Induction	最小叠装系数 Min. Lamination factor
		mm	kg/dm^3	W/kg	T	%
普通型 Convertional	23Q110	0.23	7.65	1.10	1.82	94.5
	23Q120	0.23	7.65	1.20	1.82	95.0
	27Q120	0.27	7.65	1.20	1.82	95.5
	27Q130	0.27	7.65	1.30	1.82	96.0
	30Q120	0.30	7.65	1.20	1.82	96.0
	30Q130	0.30	7.65	1.30	1.82	96.0
	35Q135	0.35	7.65	1.35	1.82	96.5
	35Q145	0.35	7.65	1.45	1.82	96.5
	35Q155	0.35	7.65	1.55	1.82	96.5
高磁感型 High Induction	18QG085	0.18	7.65	0.85	1.86	92.0
	18QG095	0.18	7.65	0.95	1.86	92.0
	20QG085	0.20	7.65	0.85	1.86	93.0
	20QG095	0.20	7.65	0.95	1.86	93.0
	23QG085	0.23	7.65	0.85	1.88	94.5
	23QG090	0.23	7.65	0.90	1.88	94.5
	23QG095	0.23	7.65	0.95	1.88	94.5
	23QG100	0.23	7.65	1.00	1.88	94.5
	27QG095	0.27	7.65	0.95	1.89	95.0
	27QG100	0.27	7.65	1.00	1.89	95.0
	27QG120	0.27	7.65	1.20	1.89	95.0
	30QG100	0.30	7.65	1.00	1.89	95.5
	30QG105	0.30	7.65	1.05	1.89	95.5
	30QG120	0.30	7.65	1.20	1.89	95.5
磁畴细化高磁感型 Domamin refined high induction	18RK070	0.18	7.65	0.70	1.86	92.0
	18RK075	0.18	7.65	0.75	1.86	92.0
	18RK085	0.18	7.65	0.85	1.86	92.0
	20RK070	0.20	7.65	0.70	1.86	93.0
	20RK075	0.20	7.65	0.75	1.86	93.0
	20RK085	0.20	7.65	0.85	1.86	93.0
	23RK075	0.23	7.65	0.75	1.88	94.5
	23RK080	0.23	7.65	0.80	1.88	94.5
	23RK085	0.23	7.65	0.85	1.88	94.5
	23RK090	0.23	7.65	0.90	1.88	94.5
	23RK100	0.23	7.65	1.00	1.88	94.5
	27RK085	0.27	7.65	0.85	1.89	95.0
	27RK090	0.27	7.65	0.90	1.89	95.0
	27RK095	0.27	7.65	0.95	1.89	95.0
	27RK100	0.27	7.65	1.00	1.89	95.0
	27RK120	0.27	7.65	1.20	1.89	95.0
	30RK095	0.30	7.65	0.95	1.89	95.5
	30RK100	0.30	7.65	1.00	1.89	95.5
	30RK105	0.30	7.65	1.05	1.89	95.5
	30RK120	0.30	7.65	1.20	1.89	95.5

注：a.检测依据GB/T3655（Q系列和QG系列）、GB/T13789（RK系列）。
b.Q系列和QG系列试样均沿轧制方向，并经800℃保温2小时消除应力退火处理后进行磁性能测试。

Note: a. Testing standards are GB/T3655(Q type and QG type)、GB/T13789(RK type).
b. Q type and QG type test specimens are sheared to the rolling direction and annealed for stress relieving.

电磁性能典型值
Typical Magnetic Properties

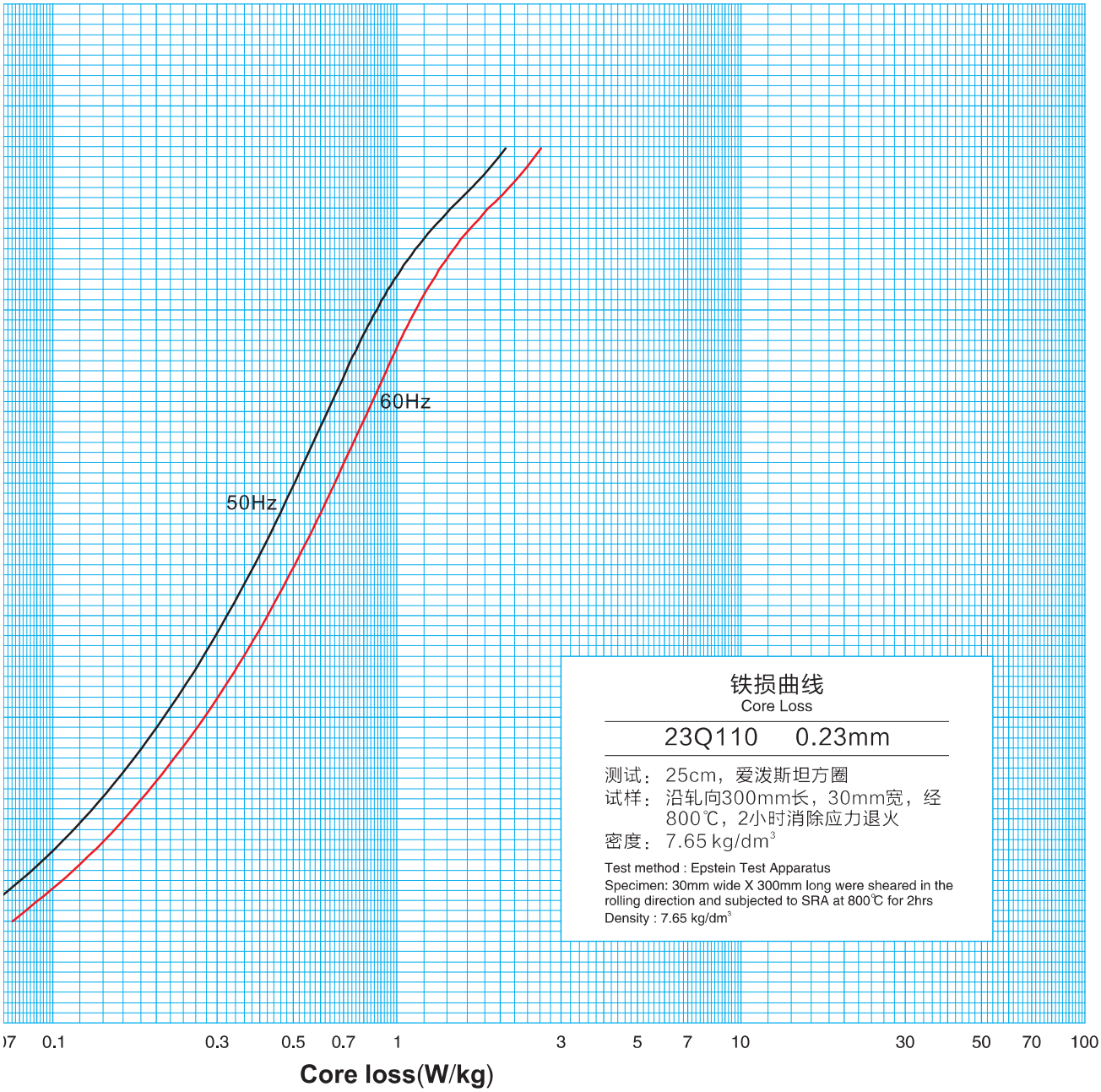
牌号 Grade	公称厚度 Nominal thickness mm	理论密度 Theoretical density kg/dm³	铁损 Core loss W/kg				磁感 Induction	
			50Hz		60Hz			
			1.5T	1.7T	1.5T	1.7T	800A/m	2500A/m
23Q110	0.23	7.65	0.74	1.08	0.96	1.39	1.87	1.93
23Q120	0.23	7.65	0.77	1.17	1.00	1.50	1.84	1.91
27Q120	0.27	7.65	0.81	1.12	1.06	1.46	1.86	1.92
27Q130	0.27	7.65	0.84	1.20	1.10	1.55	1.85	1.92
30Q120	0.30	7.65	0.82	1.13	1.08	1.47	1.88	1.94
30Q130	0.30	7.65	0.88	1.20	1.15	1.56	1.87	1.93
35Q135	0.35	7.65	0.94	1.29	1.25	1.69	1.88	1.94
35Q145	0.35	7.65	1.02	1.35	1.36	1.78	1.87	1.93
35Q155	0.35	7.65	1.08	1.45	1.44	1.91	1.86	1.92
18QG085	0.18	7.65	0.61	0.83	0.79	1.08	1.90	1.94
18QG095	0.18	7.65	0.64	0.93	0.83	1.20	1.89	1.93
20QG085	0.20	7.65	0.62	0.84	0.81	1.09	1.90	1.94
20QG095	0.20	7.65	0.65	0.93	0.85	1.20	1.89	1.94
23QG085	0.23	7.65	0.63	0.84	0.81	1.08	1.92	1.95
23QG090	0.23	7.65	0.64	0.88	0.85	1.15	1.91	1.95
23QG095	0.23	7.65	0.67	0.93	0.88	1.21	1.91	1.95
23QG100	0.23	7.65	0.71	0.98	0.93	1.28	1.90	1.95
27QG095	0.27	7.65	0.69	0.93	0.91	1.22	1.92	1.96
27QG100	0.27	7.65	0.72	0.98	0.95	1.28	1.91	1.96
27QG120	0.27	7.65	0.76	1.04	1.00	1.36	1.90	1.94
30QG100	0.30	7.65	0.74	0.98	0.99	1.29	1.93	1.96
30QG105	0.30	7.65	0.76	1.02	1.02	1.34	1.92	1.96
30QG120	0.30	7.65	0.81	1.10	1.07	1.44	1.91	1.95
18RK070	0.18	7.65	0.50	0.68	0.64	0.88	1.91	1.95
18RK075	0.18	7.65	0.51	0.72	0.67	0.93	1.90	1.94
18RK085	0.18	7.65	0.56	0.83	0.73	1.06	1.89	1.95
20RK070	0.20	7.65	0.50	0.68	0.66	0.88	1.92	1.96
20RK075	0.20	7.65	0.52	0.74	0.68	0.95	1.90	1.95
20RK085	0.20	7.65	0.57	0.84	0.74	1.08	1.89	1.94
23RK075	0.23	7.65	0.56	0.74	0.74	0.98	1.92	1.96
23RK080	0.23	7.65	0.58	0.78	0.76	1.03	1.92	1.96
23RK085	0.23	7.65	0.60	0.83	0.80	1.09	1.91	1.96
23RK090	0.23	7.65	0.62	0.88	0.82	1.13	1.90	1.96
23RK100	0.23	7.65	0.69	0.97	0.90	1.25	1.90	1.95
27RK085	0.27	7.65	0.62	0.83	0.82	1.09	1.92	1.95
27RK090	0.27	7.65	0.65	0.88	0.87	1.16	1.92	1.96
27RK095	0.27	7.65	0.67	0.93	0.89	1.22	1.91	1.96
27RK100	0.27	7.65	0.71	0.98	0.94	1.29	1.90	1.95
27RK120	0.27	7.65	0.77	1.10	1.02	1.43	1.89	1.95
30RK095	0.30	7.65	0.70	0.94	0.94	1.24	1.93	1.96
30RK100	0.30	7.65	0.72	0.97	0.96	1.29	1.92	1.96
30RK105	0.30	7.65	0.74	1.00	0.98	1.31	1.91	1.96
30RK120	0.30	7.65	0.80	1.08	1.06	1.41	1.90	1.95

电磁性能曲线
Electromagnetic Property Curves

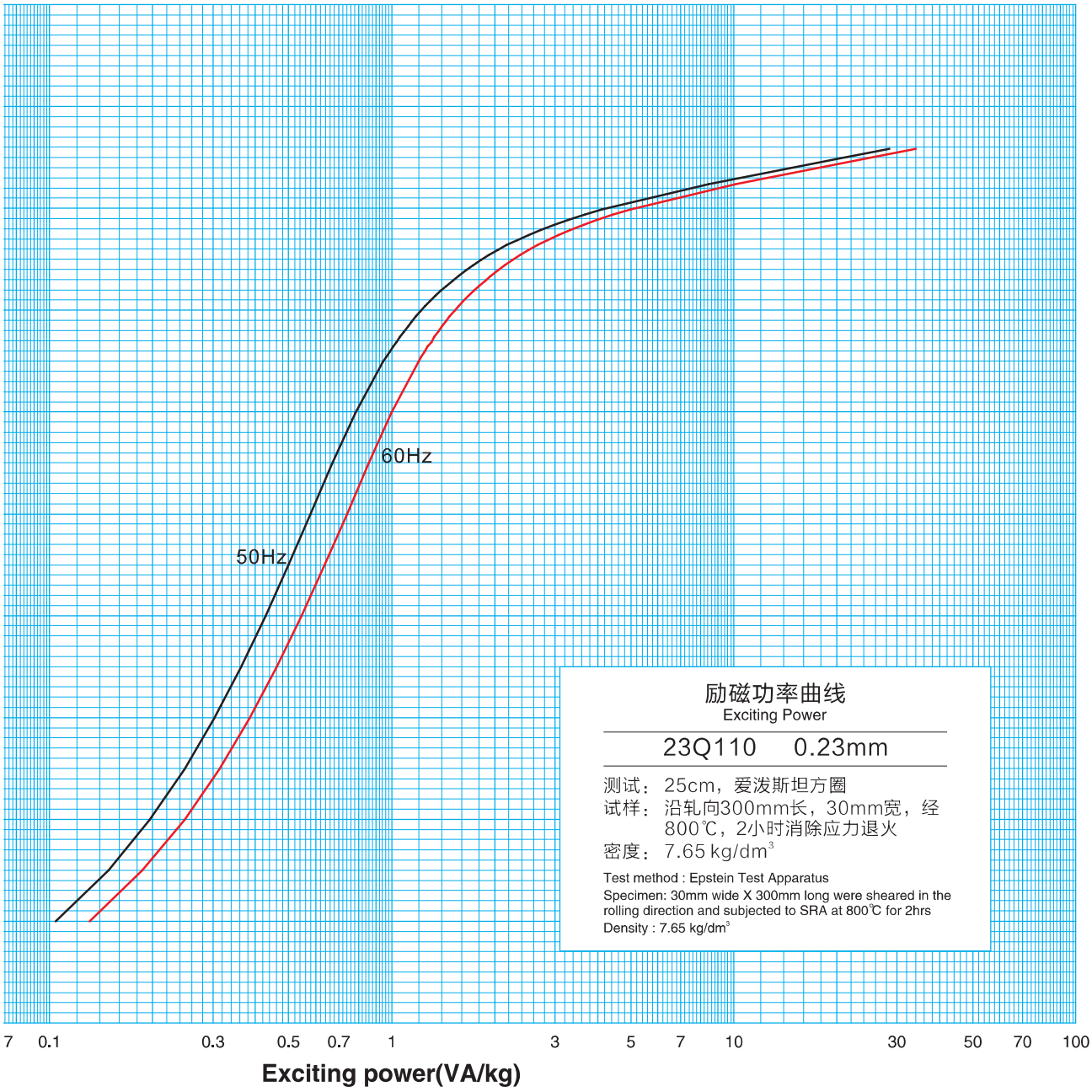
23Q110

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.058	0.104	0.076	0.131	1.62	0.904	1.296	1.173	1.621
0.50	0.087	0.148	0.115	0.186	1.63	0.923	1.342	1.197	1.677
0.60	0.122	0.196	0.161	0.247	1.64	0.940	1.392	1.220	1.737
0.70	0.163	0.248	0.214	0.313	1.65	0.961	1.446	1.245	1.801
0.80	0.210	0.303	0.275	0.384	1.66	0.981	1.506	1.272	1.873
0.90	0.262	0.362	0.344	0.461	1.67	1.003	1.573	1.298	1.953
1.00	0.321	0.427	0.420	0.545	1.68	1.027	1.647	1.327	2.041
1.10	0.385	0.498	0.504	0.636	1.69	1.050	1.727	1.357	2.140
1.20	0.456	0.579	0.598	0.738	1.70	1.075	1.821	1.389	2.249
1.30	0.536	0.670	0.702	0.856	1.71	1.103	1.923	1.422	2.372
1.40	0.626	0.784	0.819	0.998	1.72	1.131	2.042	1.459	2.511
1.50	0.732	0.943	0.956	1.194	1.73	1.161	2.176	1.498	2.674
1.51	0.745	0.964	0.971	1.219	1.74	1.193	2.331	1.536	2.860
1.52	0.757	0.985	0.988	1.246	1.75	1.229	2.513	1.580	3.076
1.53	0.770	1.008	1.003	1.274	1.76	1.265	2.728	1.625	3.332
1.54	0.783	1.032	1.020	1.304	1.77	1.305	2.984	1.678	3.633
1.55	0.796	1.058	1.037	1.334	1.78	1.347	3.295	1.731	3.994
1.56	0.810	1.086	1.054	1.367	1.79	1.391	3.667	1.779	4.430
1.57	0.824	1.114	1.073	1.403	1.80	1.435	4.121	1.841	4.993
1.58	0.839	1.146	1.092	1.439	1.85	1.693	8.454	2.170	10.136
1.59	0.854	1.179	1.111	1.479	1.90	1.970	19.951	2.498	23.853
1.60	0.870	1.215	1.131	1.524	1.91	2.043	25.909	2.587	31.007
1.61	0.887	1.254	1.152	1.571	1.92	2.074	28.462	2.625	34.073

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	10	0.515	60	1.649	402	1.832	3017	1.946
3	0.060	12	0.756	70	1.673	502	1.846	4020	1.954
4	0.091	15	1.069	80	1.690	603	1.857	5025	1.959
5	0.130	18	1.237	90	1.705	703	1.866	6031	1.962
6	0.177	20	1.306	100	1.718	803	1.875	7036	1.965
7	0.235	30	1.489	151	1.759	1005	1.888	8037	1.967
8	0.308	40	1.569	201	1.782	1508	1.912	9047	1.969
9	0.411	50	1.617	302	1.812	2011	1.928	10051	1.970


60Hz
50Hz
铁损曲线
Core Loss
23Q110 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23Q110

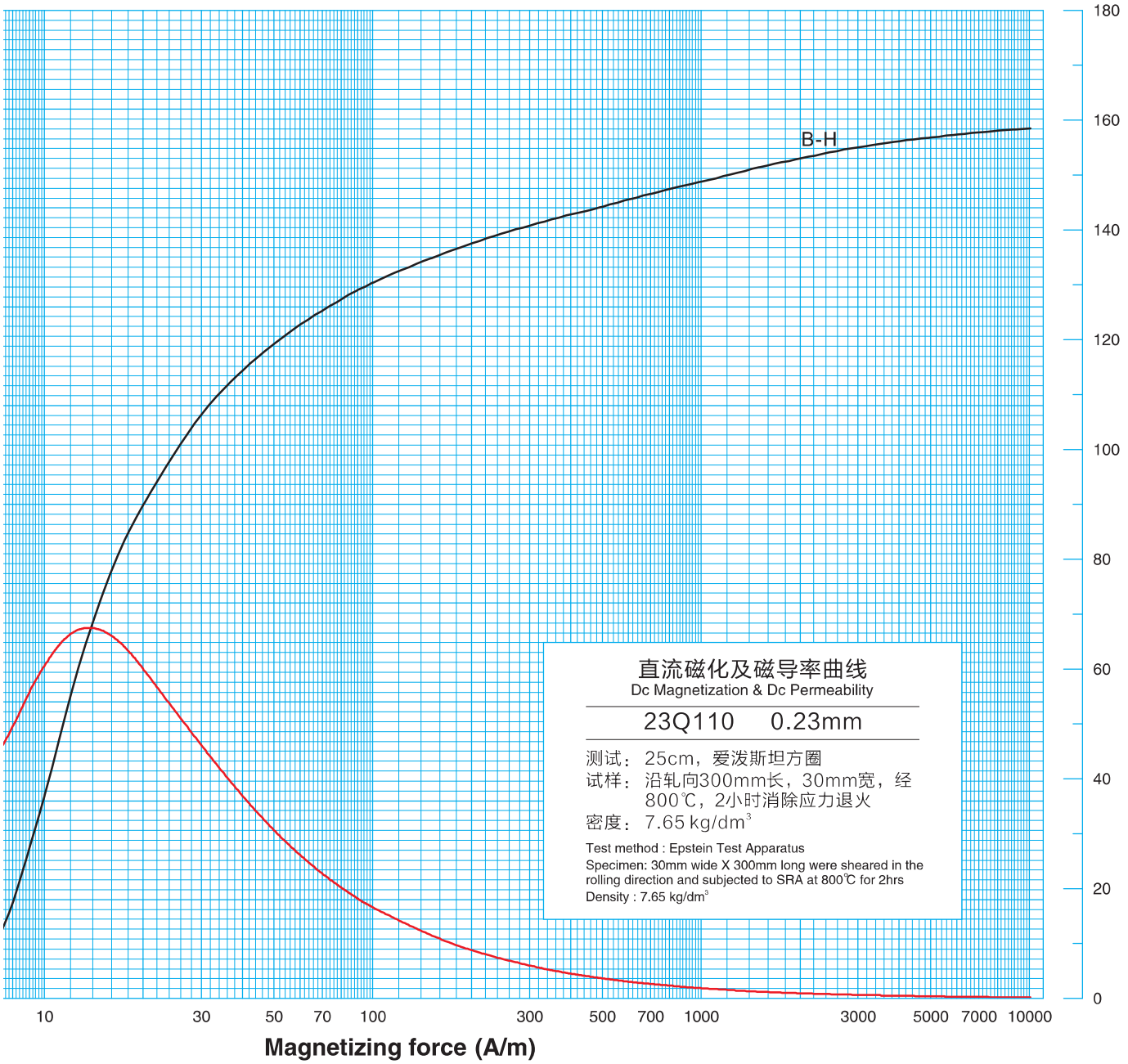


励磁功率曲线
Exciting Power

23Q110　0.23mm

测试：25cm，爱泼斯坦方圈
试样：沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度：7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3



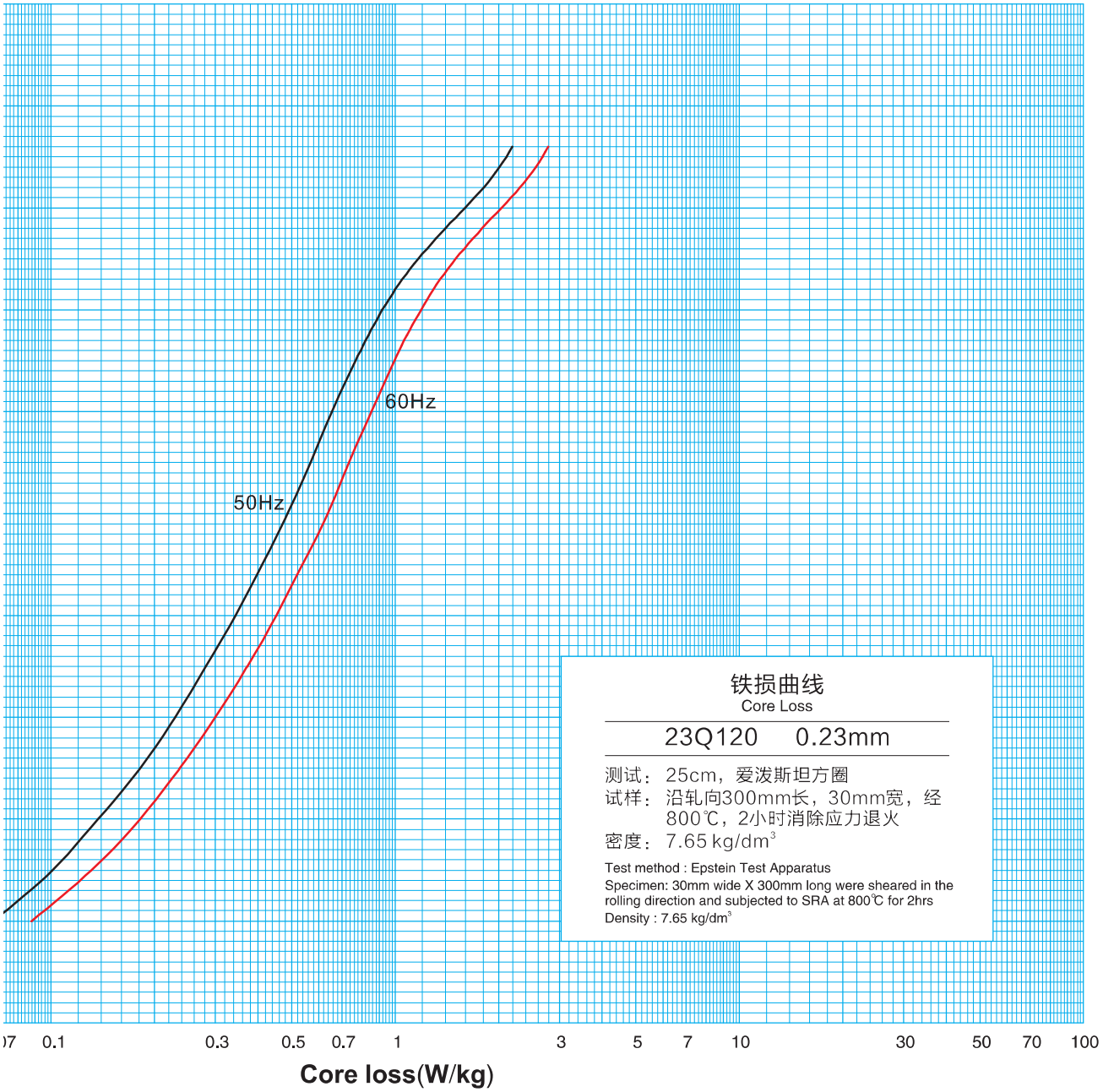
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

23Q110

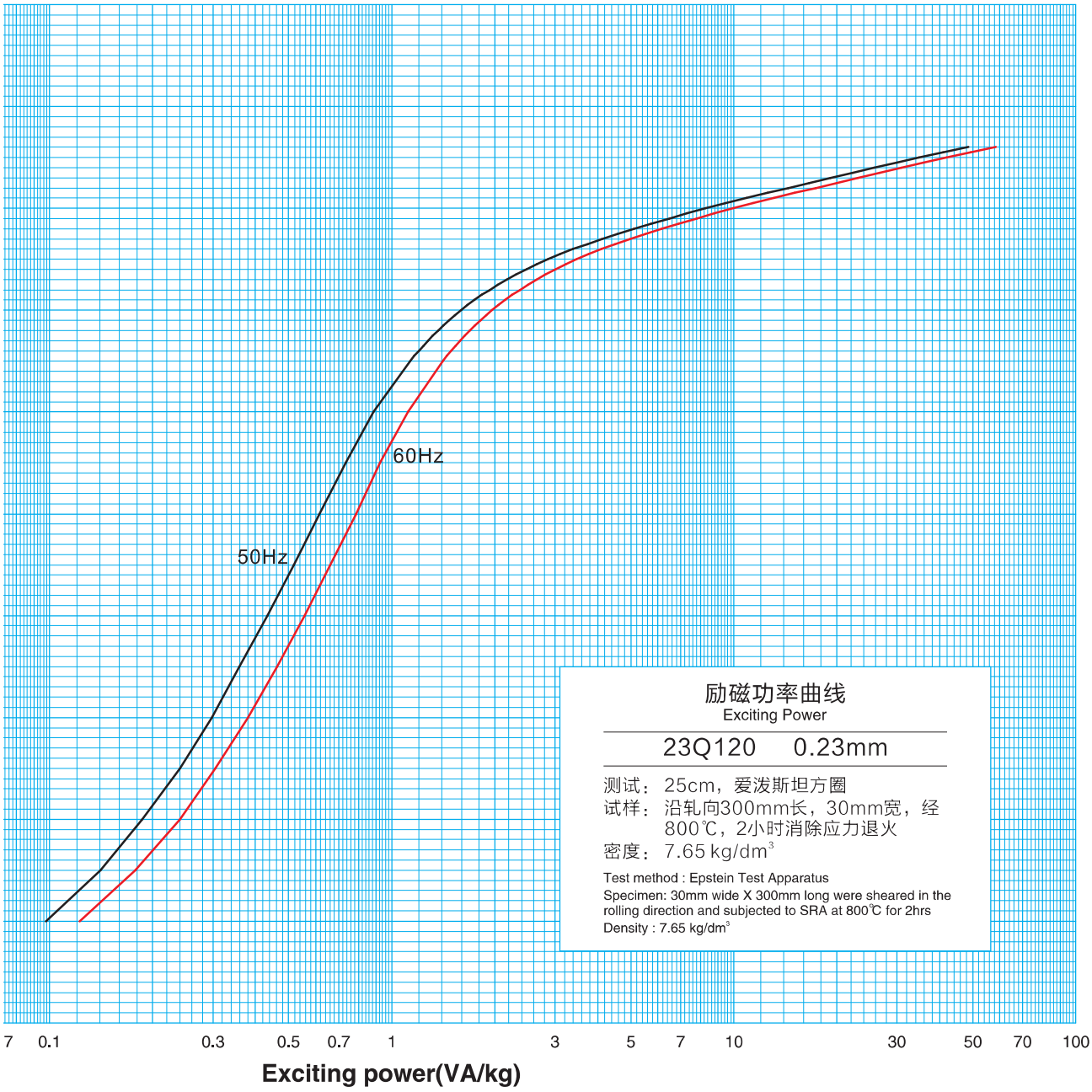
23Q120

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.068	0.098	0.088	0.123	1.66	1.050	2.169	1.353	2.650
0.50	0.101	0.141	0.131	0.178	1.67	1.077	2.312	1.386	2.816
0.60	0.137	0.186	0.182	0.240	1.68	1.106	2.474	1.422	3.009
0.70	0.182	0.240	0.237	0.305	1.69	1.136	2.657	1.460	3.227
0.80	0.230	0.298	0.301	0.381	1.70	1.168	2.868	1.499	3.474
0.90	0.282	0.358	0.372	0.463	1.71	1.201	3.112	1.542	3.772
1.00	0.343	0.433	0.451	0.556	1.72	1.238	3.399	1.586	4.108
1.10	0.411	0.517	0.538	0.661	1.73	1.276	3.730	1.633	4.499
1.20	0.487	0.616	0.636	0.785	1.74	1.315	4.112	1.684	4.968
1.30	0.568	0.734	0.734	0.923	1.75	1.357	4.571	1.737	5.505
1.40	0.655	0.887	0.854	1.118	1.76	1.402	5.101	1.791	6.146
1.50	0.769	1.132	0.996	1.409	1.77	1.447	5.726	1.848	6.886
1.51	0.781	1.164	1.012	1.448	1.78	1.496	6.469	1.909	7.780
1.52	0.794	1.199	1.028	1.490	1.79	1.545	7.299	1.971	8.772
1.53	0.808	1.237	1.045	1.536	1.80	1.595	8.302	2.035	9.973
1.54	0.821	1.276	1.063	1.583	1.81	1.647	9.499	2.103	11.419
1.55	0.836	1.319	1.082	1.636	1.82	1.701	10.904	2.169	13.081
1.56	0.851	1.366	1.102	1.692	1.83	1.754	12.552	2.237	15.050
1.57	0.867	1.416	1.122	1.752	1.84	1.808	14.417	2.306	17.341
1.58	0.883	1.471	1.143	1.817	1.85	1.860	16.635	2.369	19.990
1.59	0.900	1.530	1.165	1.889	1.86	1.913	19.216	2.437	23.070
1.60	0.918	1.596	1.188	1.967	1.87	1.963	22.275	2.501	26.715
1.61	0.937	1.667	1.212	2.053	1.88	2.010	25.722	2.562	30.910
1.62	0.957	1.746	1.236	2.147	1.89	2.057	29.952	2.621	35.938
1.63	0.979	1.837	1.263	2.252	1.90	2.102	34.833	2.678	41.949
1.64	1.000	1.934	1.291	2.370	1.91	2.145	40.946	2.731	49.197
1.65	1.025	2.045	1.321	2.502	1.92	2.188	48.442	2.785	58.364

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.028	10	0.613	60	1.565	402	1.786	3017	1.923
3	0.063	12	0.816	70	1.593	502	1.803	4021	1.935
4	0.112	15	1.021	80	1.616	602	1.818	5025	1.943
5	0.162	18	1.146	90	1.634	703	1.829	6030	1.949
6	0.227	20	1.202	100	1.649	803	1.839	7036	1.953
7	0.305	30	1.383	151	1.698	1004	1.854	8041	1.956
8	0.398	40	1.471	201	1.728	1508	1.882	9048	1.959
9	0.508	50	1.525	302	1.764	2011	1.900	10053	1.961


60Hz
50Hz
铁损曲线
Core Loss
23Q120 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23Q120

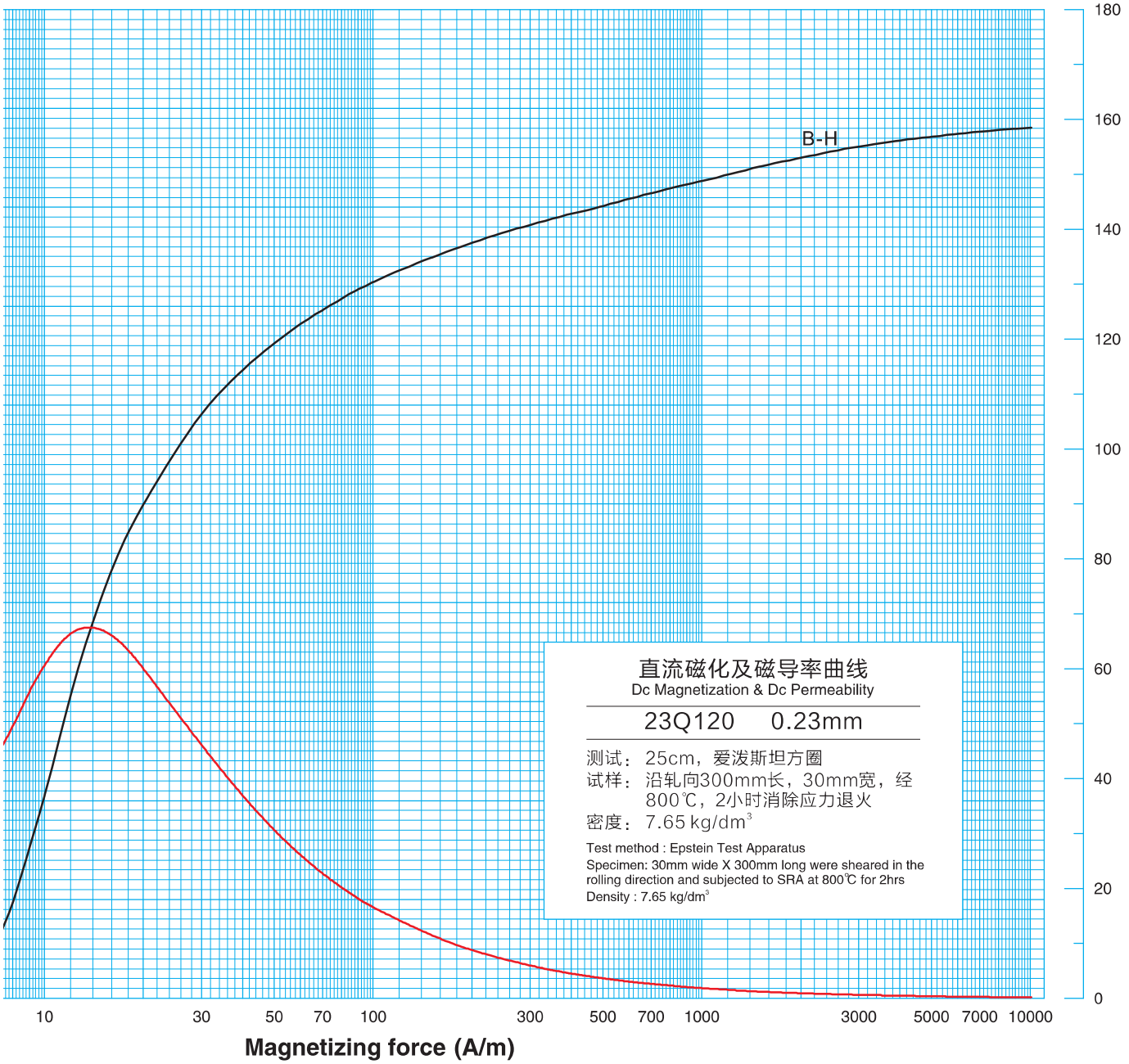


励磁功率曲线
Exciting Power

23Q120　0.23mm

测试：25cm，爱泼斯坦方圈
试样：沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度：7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3



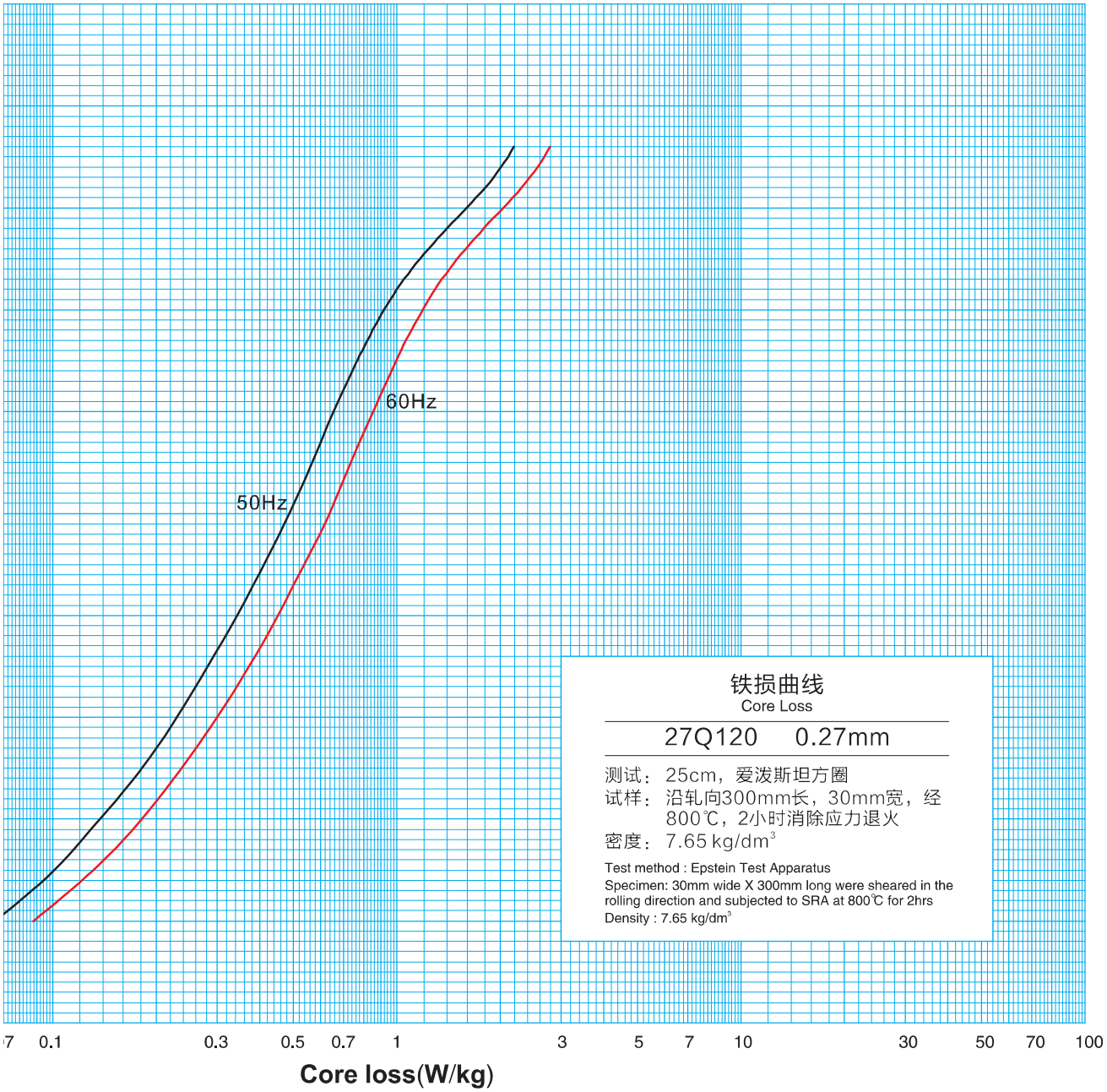
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

23Q120

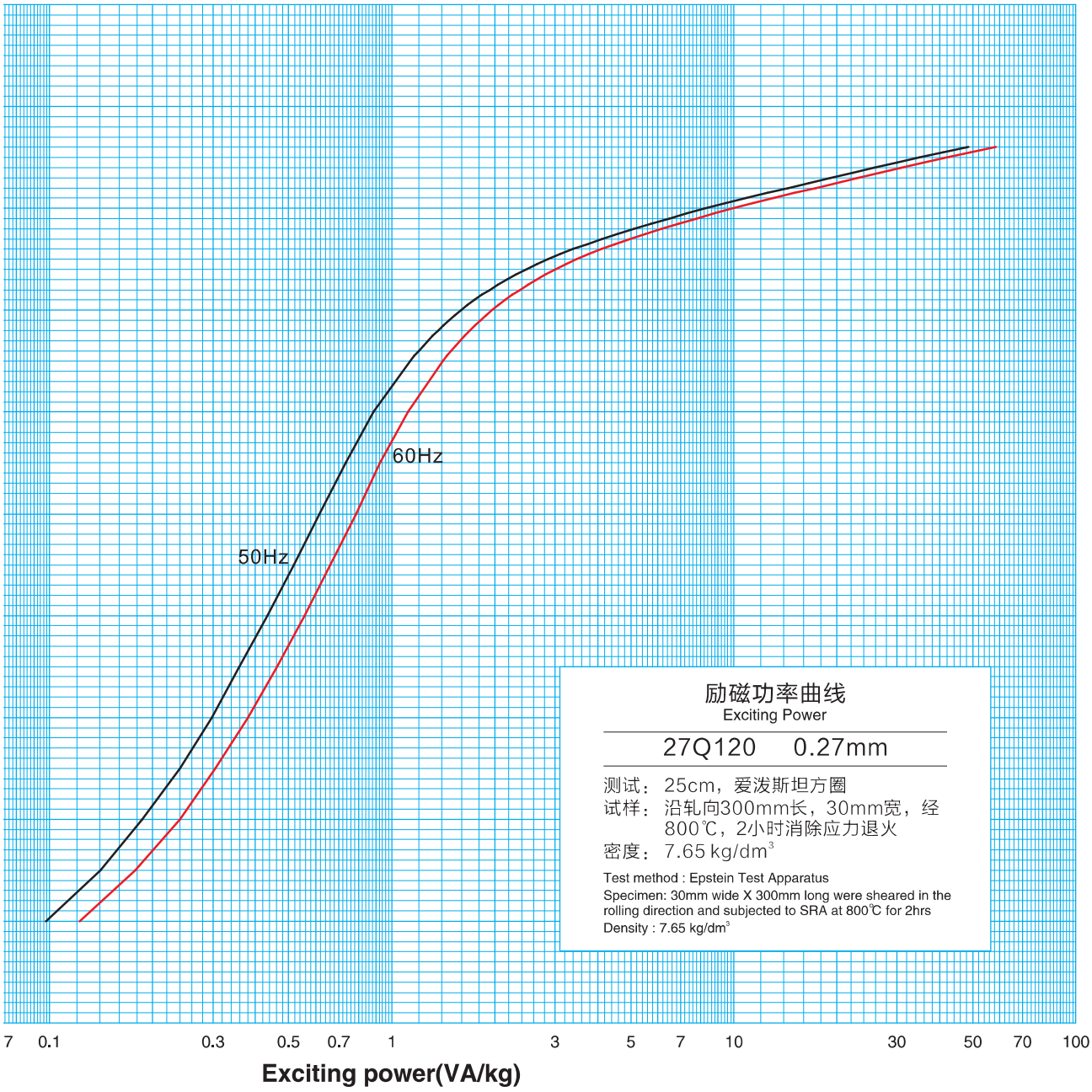
27Q120

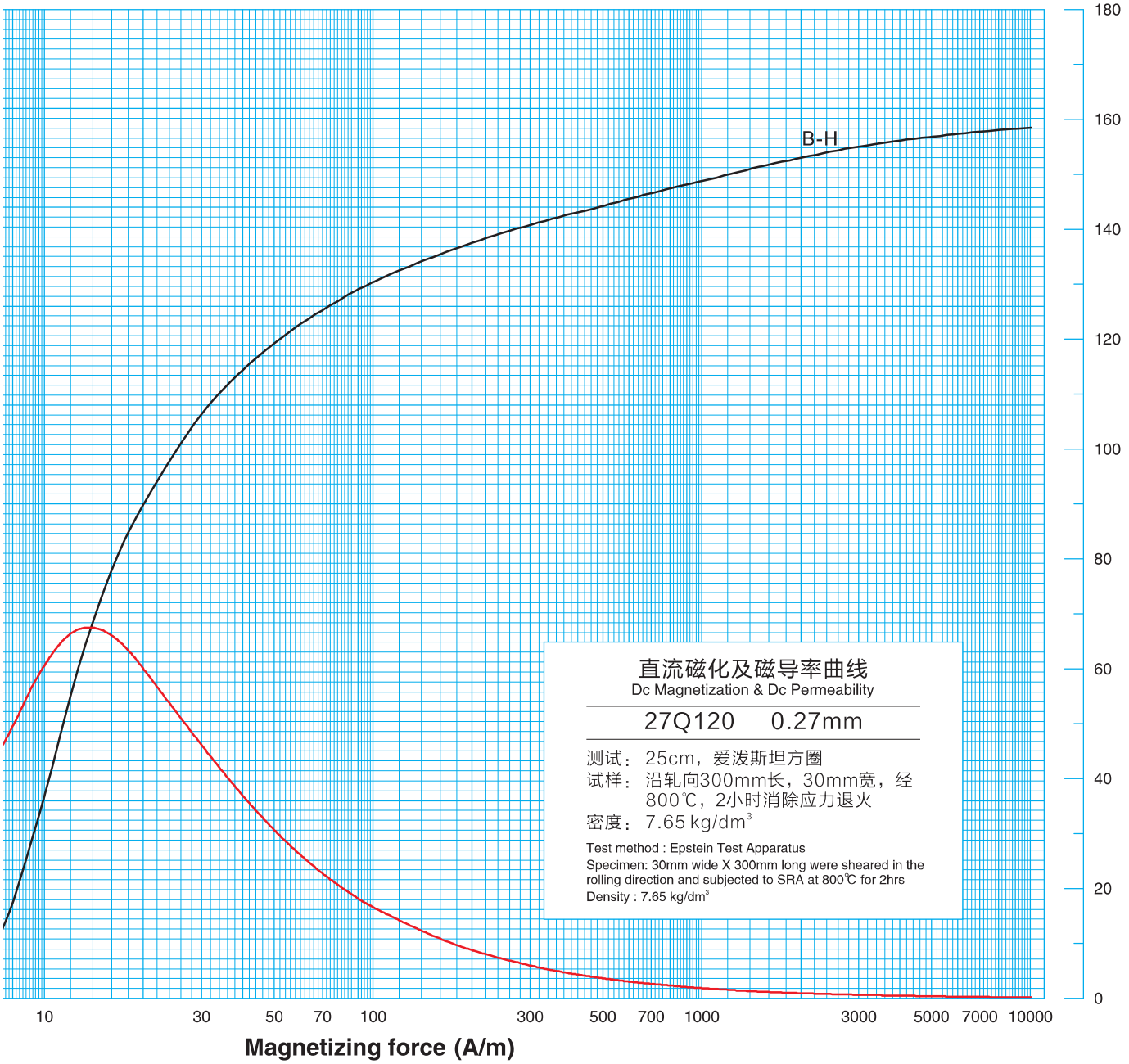
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.072	0.106	0.094	0.134	1.66	1.033	1.421	1.350	1.793
0.50	0.107	0.152	0.140	0.193	1.67	1.051	1.473	1.373	1.856
0.60	0.148	0.203	0.193	0.257	1.68	1.072	1.534	1.398	1.927
0.70	0.192	0.256	0.239	0.317	1.69	1.094	1.602	1.424	2.006
0.80	0.244	0.316	0.305	0.393	1.70	1.116	1.677	1.451	2.095
0.90	0.300	0.379	0.381	0.477	1.71	1.140	1.764	1.481	2.197
1.00	0.364	0.449	0.466	0.568	1.72	1.166	1.864	1.511	2.312
1.10	0.436	0.526	0.561	0.669	1.73	1.191	1.978	1.544	2.448
1.20	0.514	0.611	0.666	0.781	1.74	1.220	2.110	1.580	2.604
1.30	0.599	0.705	0.783	0.907	1.75	1.249	2.261	1.619	2.787
1.40	0.695	0.820	0.910	1.053	1.76	1.284	2.446	1.657	2.999
1.50	0.802	0.963	1.052	1.238	1.77	1.316	2.655	1.700	3.253
1.51	0.813	0.981	1.068	1.259	1.78	1.353	2.915	1.745	3.559
1.52	0.826	1.000	1.085	1.284	1.79	1.391	3.220	1.792	3.927
1.53	0.839	1.020	1.100	1.307	1.80	1.431	3.593	1.842	4.373
1.54	0.851	1.040	1.116	1.333	1.81	1.474	4.071	1.894	4.929
1.55	0.864	1.061	1.133	1.359	1.82	1.516	4.647	1.948	5.637
1.56	0.877	1.084	1.151	1.387	1.83	1.561	5.370	2.005	6.481
1.57	0.889	1.105	1.167	1.415	1.84	1.608	6.261	2.062	7.553
1.58	0.903	1.131	1.186	1.447	1.85	1.655	7.361	2.122	8.867
1.59	0.917	1.158	1.203	1.478	1.86	1.705	8.637	2.182	10.419
1.60	0.932	1.187	1.222	1.512	1.87	1.751	10.265	2.243	12.361
1.61	0.946	1.217	1.241	1.550	1.88	1.799	12.218	2.302	14.660
1.62	0.963	1.252	1.261	1.591	1.89	1.845	14.520	2.361	17.434
1.63	0.979	1.289	1.283	1.636	1.90	1.889	17.279	2.418	20.776
1.64	0.997	1.329	1.305	1.684	1.91	1.932	20.598	2.474	24.763
1.65	1.014	1.372	1.327	1.736	1.92	1.978	24.609	2.531	29.591

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.025	10	0.729	60	1.663	402	1.824	3017	1.932
3	0.059	12	0.988	70	1.682	502	1.837	4020	1.941
4	0.130	15	1.218	80	1.699	603	1.847	5024	1.947
5	0.185	18	1.336	90	1.712	703	1.856	6030	1.948
6	0.259	20	1.387	100	1.722	803	1.865	7036	1.950
7	0.347	30	1.531	151	1.760	1004	1.877	8041	1.951
8	0.461	40	1.597	201	1.778	1508	1.901	9060	1.952
9	0.596	50	1.635	302	1.807	2011	1.918	10053	1.952


60Hz
50Hz
铁损曲线
Core Loss
27Q120 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27Q120


60Hz
50Hz
励磁功率曲线
Exciting Power
27Q120 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)



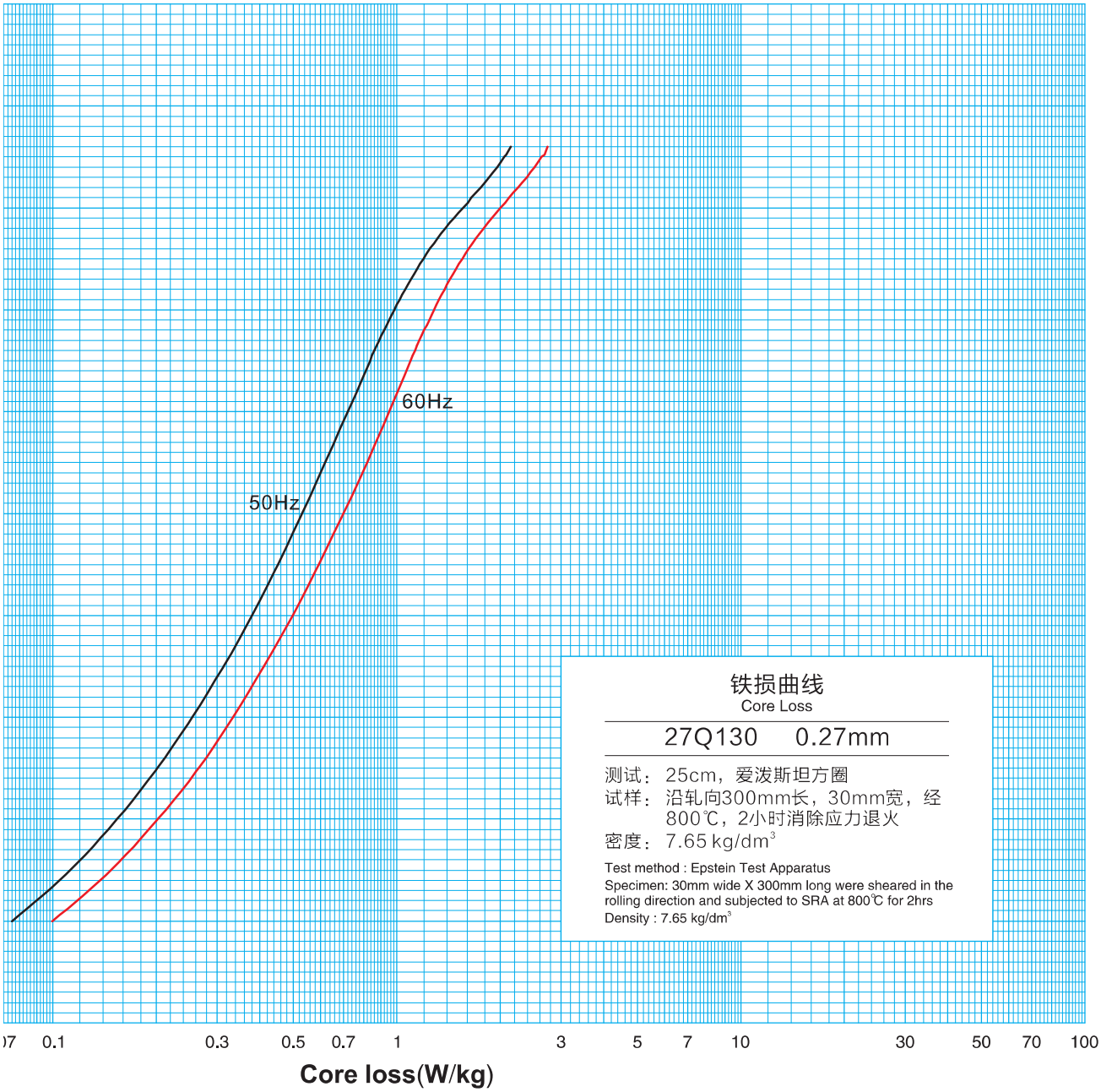
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

27Q120

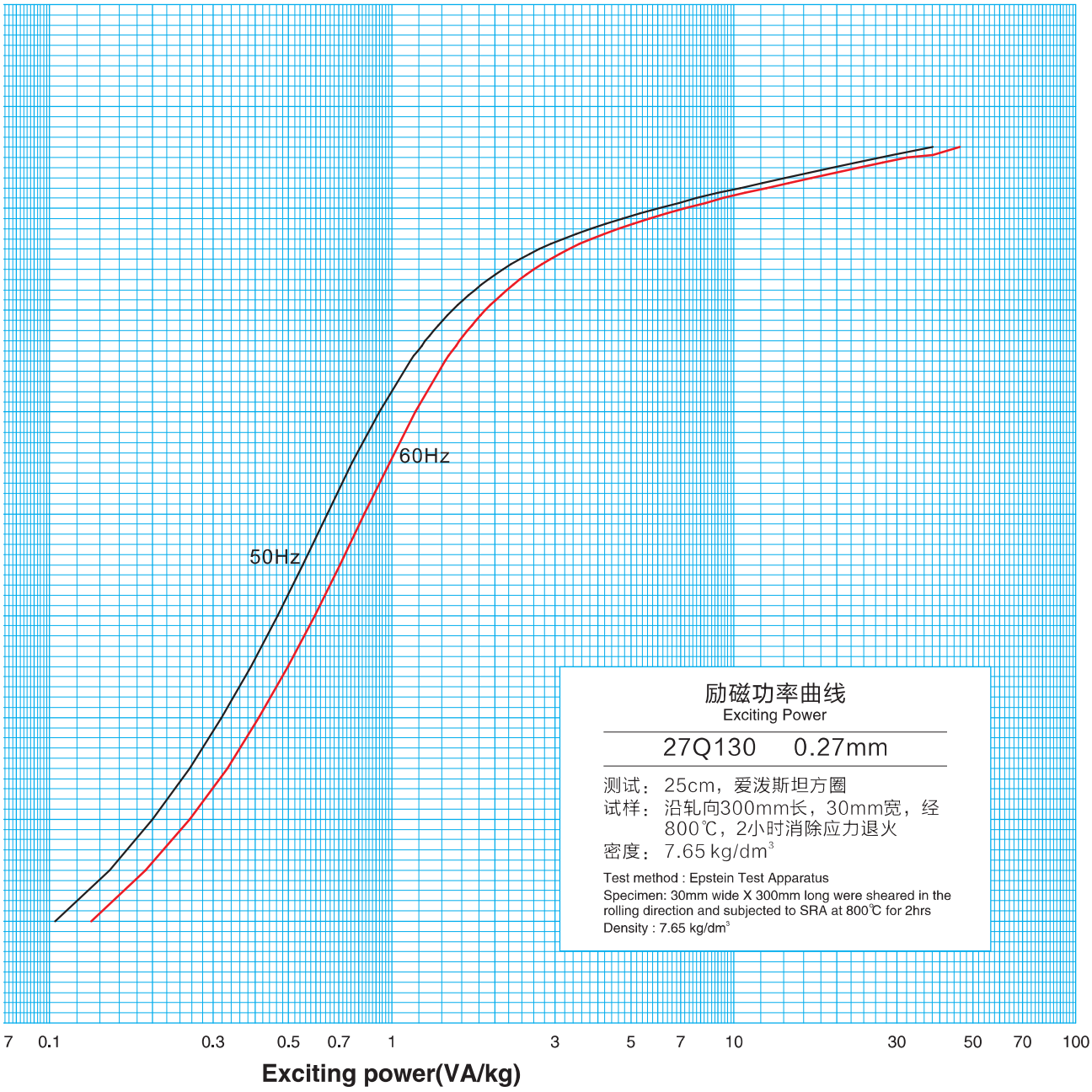
27Q130

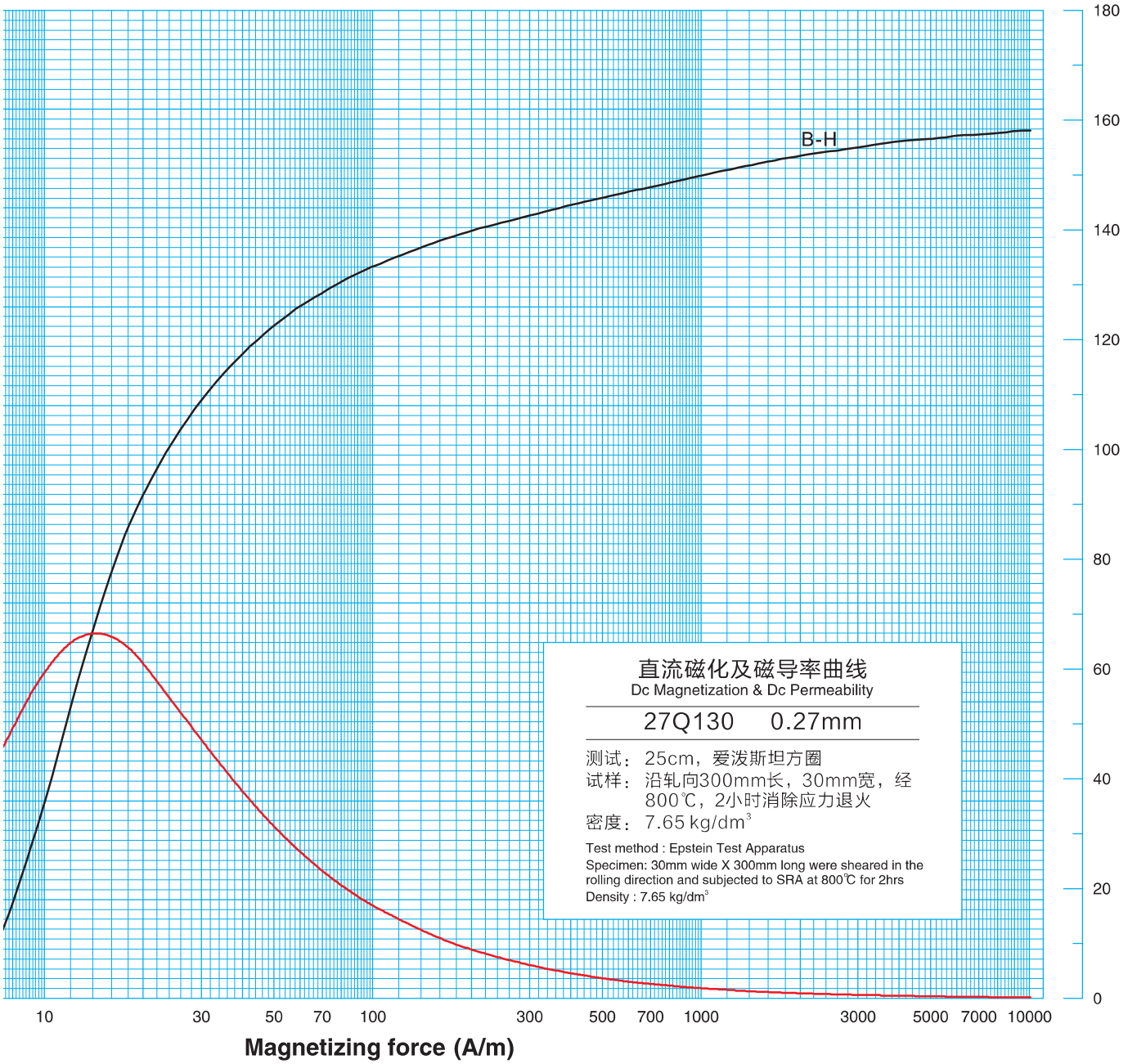
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.076	0.104	0.100	0.132	1.66	1.098	1.911	1.428	2.363
0.50	0.112	0.149	0.147	0.191	1.67	1.120	2.007	1.456	2.476
0.60	0.154	0.200	0.202	0.256	1.68	1.144	2.115	1.486	2.603
0.70	0.201	0.257	0.265	0.330	1.69	1.168	2.235	1.517	2.746
0.80	0.254	0.318	0.334	0.409	1.70	1.196	2.374	1.549	2.909
0.90	0.314	0.387	0.411	0.497	1.71	1.221	2.531	1.585	3.094
1.00	0.380	0.464	0.499	0.597	1.72	1.248	2.704	1.621	3.306
1.10	0.452	0.549	0.594	0.707	1.73	1.281	2.918	1.657	3.546
1.20	0.531	0.648	0.699	0.833	1.74	1.313	3.166	1.697	3.831
1.30	0.620	0.766	0.819	0.987	1.75	1.348	3.454	1.740	4.174
1.40	0.721	0.920	0.949	1.174	1.76	1.386	3.810	1.787	4.588
1.50	0.836	1.133	1.095	1.433	1.77	1.424	4.224	1.836	5.081
1.51	0.849	1.161	1.112	1.467	1.78	1.467	4.727	1.888	5.674
1.52	0.862	1.191	1.129	1.503	1.79	1.512	5.331	1.943	6.382
1.53	0.876	1.222	1.146	1.539	1.80	1.557	6.048	2.000	7.218
1.54	0.889	1.254	1.164	1.579	1.81	1.605	6.911	2.063	8.274
1.55	0.904	1.289	1.182	1.621	1.82	1.649	7.798	2.119	9.317
1.56	0.919	1.327	1.201	1.664	1.83	1.700	8.997	2.184	10.788
1.57	0.934	1.366	1.221	1.714	1.84	1.751	10.426	2.249	12.487
1.58	0.950	1.409	1.241	1.764	1.85	1.805	12.131	2.316	14.492
1.59	0.966	1.455	1.261	1.819	1.86	1.857	14.135	2.383	16.922
1.60	0.983	1.504	1.283	1.879	1.87	1.908	16.554	2.448	19.778
1.61	1.000	1.558	1.304	1.941	1.88	1.959	19.368	2.510	23.146
1.62	1.018	1.615	1.326	2.010	1.89	2.008	22.774	2.573	27.266
1.63	1.037	1.679	1.351	2.088	1.90	2.054	26.888	2.632	32.124
1.64	1.056	1.750	1.376	2.170	1.91	2.076	29.062	2.690	38.239
1.65	1.076	1.826	1.401	2.263	1.92	2.144	38.158	2.744	45.745

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.029	10	0.598	60	1.602	402	1.806	3017	1.923
3	0.068	12	0.793	70	1.629	502	1.821	4019	1.935
4	0.101	15	1.013	80	1.651	602	1.833	5026	1.940
5	0.152	18	1.159	90	1.668	703	1.842	6040	1.946
6	0.220	20	1.224	100	1.681	803	1.851	7035	1.949
7	0.300	30	1.412	151	1.728	1004	1.866	8045	1.952
8	0.397	40	1.505	201	1.754	1508	1.890	9048	1.955
9	0.501	50	1.563	302	1.785	2011	1.906	10052	1.956


60Hz
50Hz
铁损曲线
Core Loss
27Q130 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27Q130


60Hz
50Hz
励磁功率曲线
Exciting Power
27Q130 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

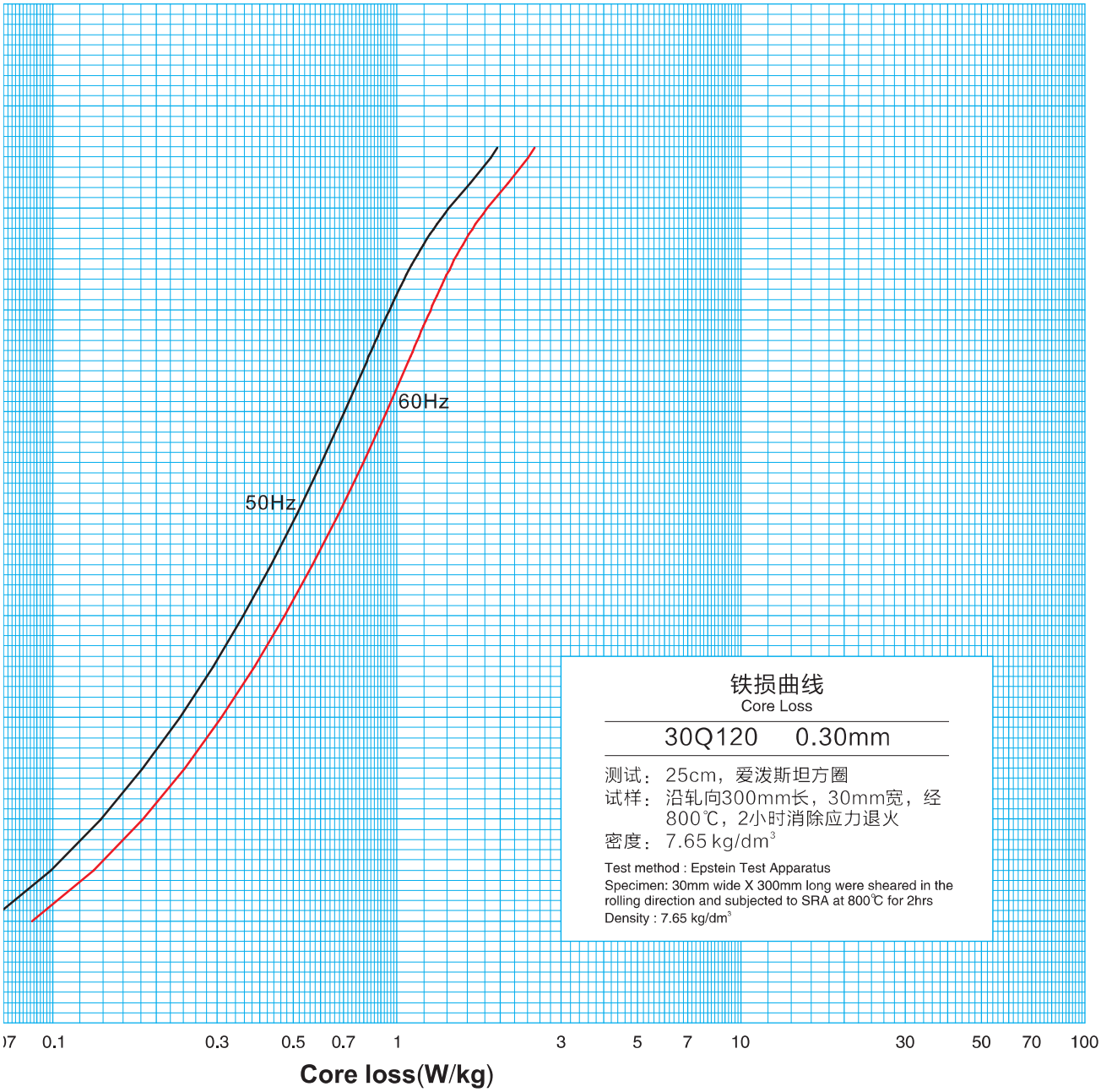

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27Q130 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

27Q130

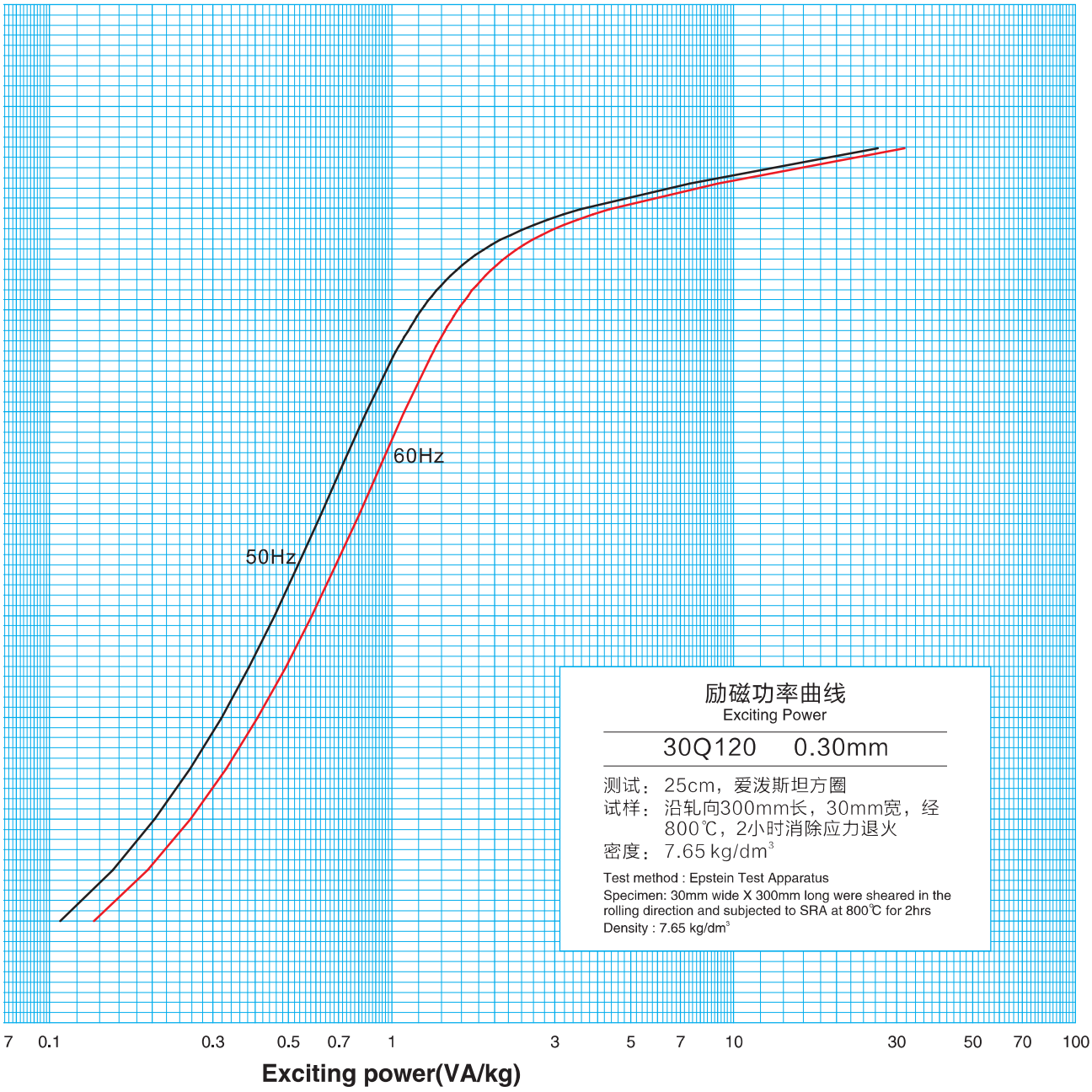
30Q120

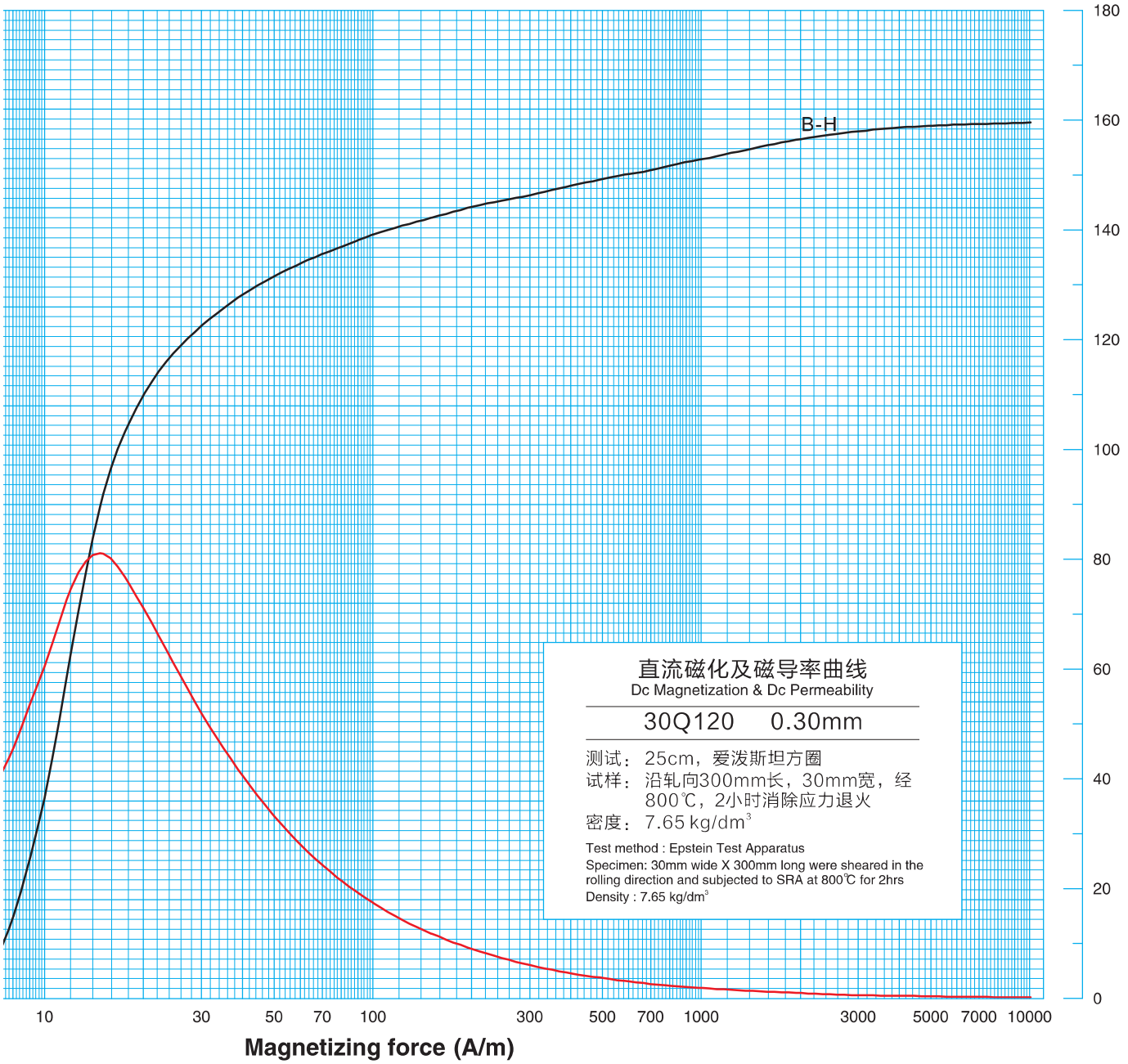
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.065	0.107	0.087	0.135	1.62	0.981	1.279	1.289	1.631
0.50	0.099	0.153	0.131	0.194	1.63	0.997	1.313	1.309	1.674
0.60	0.138	0.203	0.182	0.258	1.64	1.012	1.352	1.330	1.718
0.70	0.183	0.258	0.242	0.329	1.65	1.030	1.394	1.352	1.768
0.80	0.234	0.318	0.309	0.406	1.66	1.047	1.440	1.373	1.825
0.90	0.292	0.383	0.385	0.491	1.67	1.066	1.489	1.395	1.882
1.00	0.358	0.455	0.471	0.584	1.68	1.084	1.546	1.420	1.952
1.10	0.431	0.534	0.568	0.688	1.69	1.105	1.609	1.445	2.025
1.20	0.512	0.623	0.677	0.804	1.70	1.125	1.679	1.469	2.110
1.30	0.603	0.724	0.798	0.937	1.71	1.146	1.760	1.498	2.202
1.40	0.704	0.842	0.931	1.088	1.72	1.171	1.853	1.525	2.312
1.50	0.817	0.994	1.079	1.280	1.73	1.195	1.958	1.555	2.440
1.51	0.828	1.012	1.095	1.301	1.74	1.220	2.084	1.587	2.580
1.52	0.841	1.030	1.112	1.326	1.75	1.248	2.230	1.621	2.749
1.53	0.854	1.050	1.128	1.349	1.76	1.276	2.405	1.657	2.949
1.54	0.866	1.070	1.144	1.375	1.77	1.307	2.614	1.696	3.193
1.55	0.880	1.091	1.161	1.401	1.78	1.341	2.866	1.736	3.504
1.56	0.893	1.114	1.178	1.428	1.79	1.376	3.180	1.779	3.879
1.57	0.907	1.138	1.196	1.457	1.80	1.412	3.573	1.822	4.348
1.58	0.921	1.162	1.214	1.487	1.85	1.632	7.445	2.104	8.981
1.59	0.935	1.189	1.232	1.520	1.90	1.879	18.260	2.405	21.976
1.60	0.950	1.216	1.251	1.556	1.91	1.937	23.966	2.479	28.746
1.61	0.965	1.247	1.270	1.591	1.92	1.962	26.411	2.511	31.647

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.039	10	0.611	60	1.688	402	1.846	3017	1.956
3	0.069	12	0.901	70	1.707	502	1.858	4020	1.963
4	0.106	15	1.222	80	1.722	603	1.869	5026	1.966
5	0.149	18	1.367	90	1.736	703	1.876	6031	1.969
6	0.205	20	1.425	100	1.746	804	1.886	7038	1.970
7	0.275	30	1.562	151	1.780	1004	1.899	8042	1.971
8	0.367	40	1.626	201	1.802	1508	1.924	9048	1.972
9	0.486	50	1.663	302	1.827	2011	1.940	10052	1.973


60Hz
50Hz
铁损曲线
Core Loss
30Q120 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30Q120


60Hz
50Hz
励磁功率曲线
Exciting Power
30Q120 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

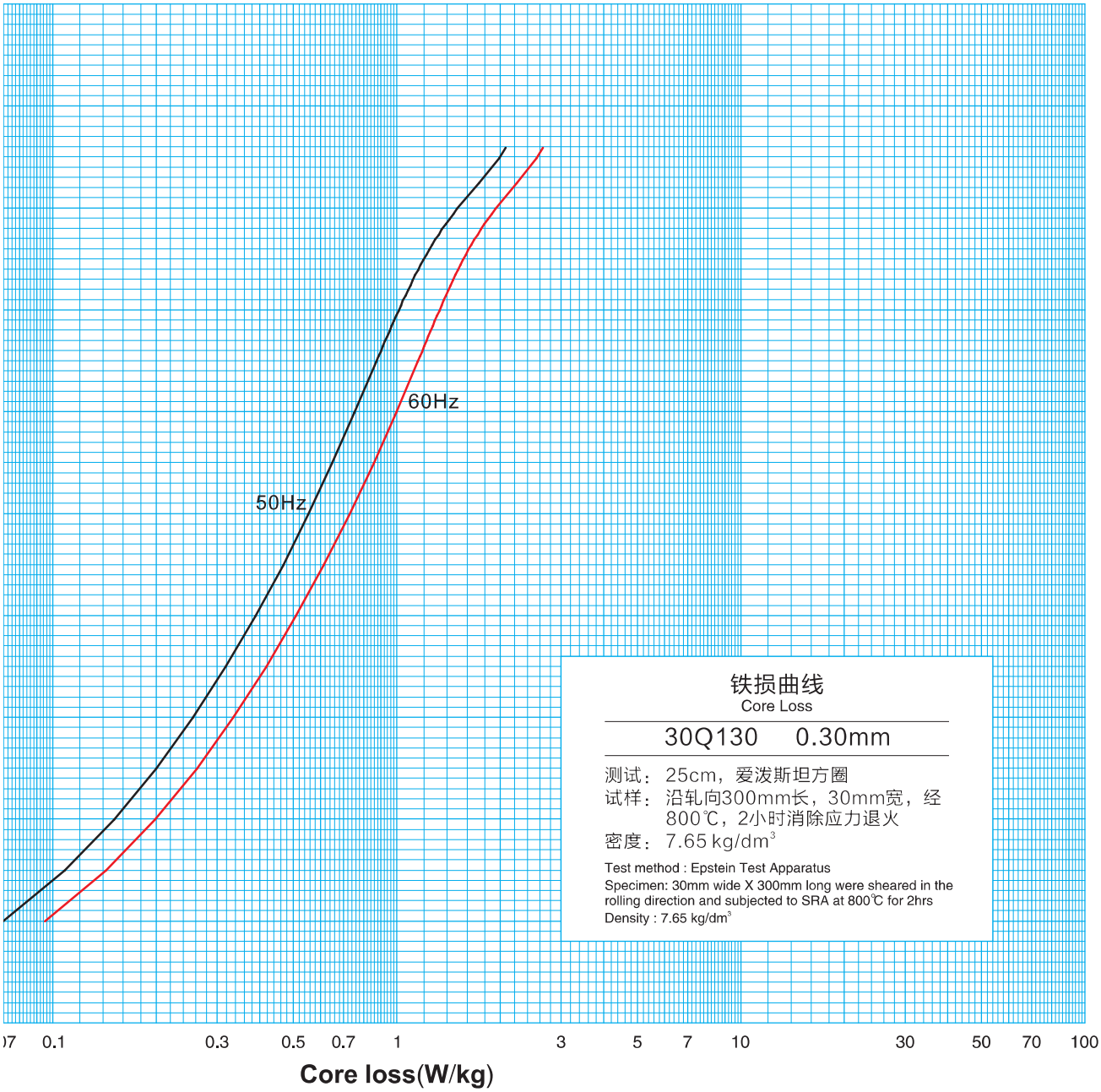

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30Q120 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

30Q120

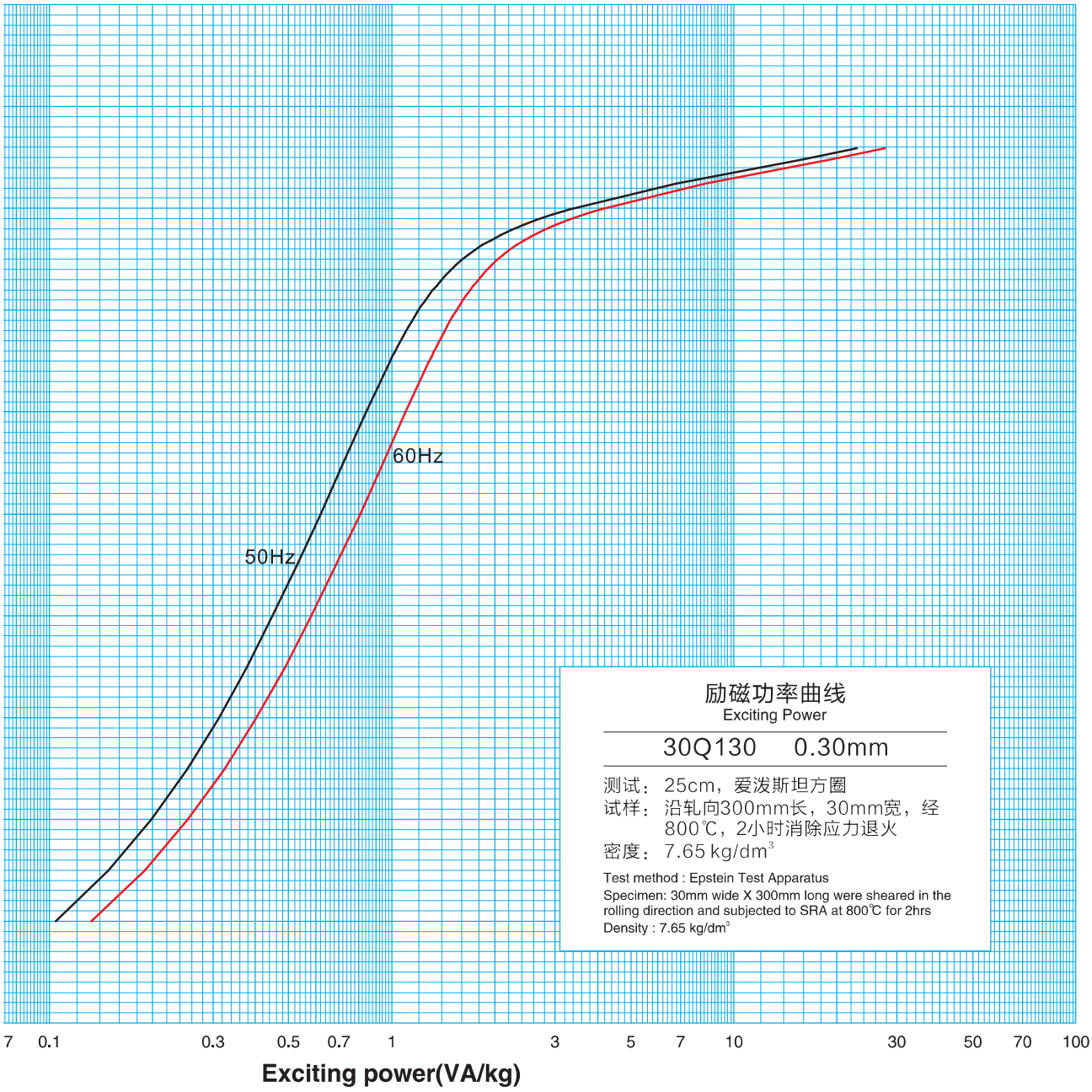
30Q130

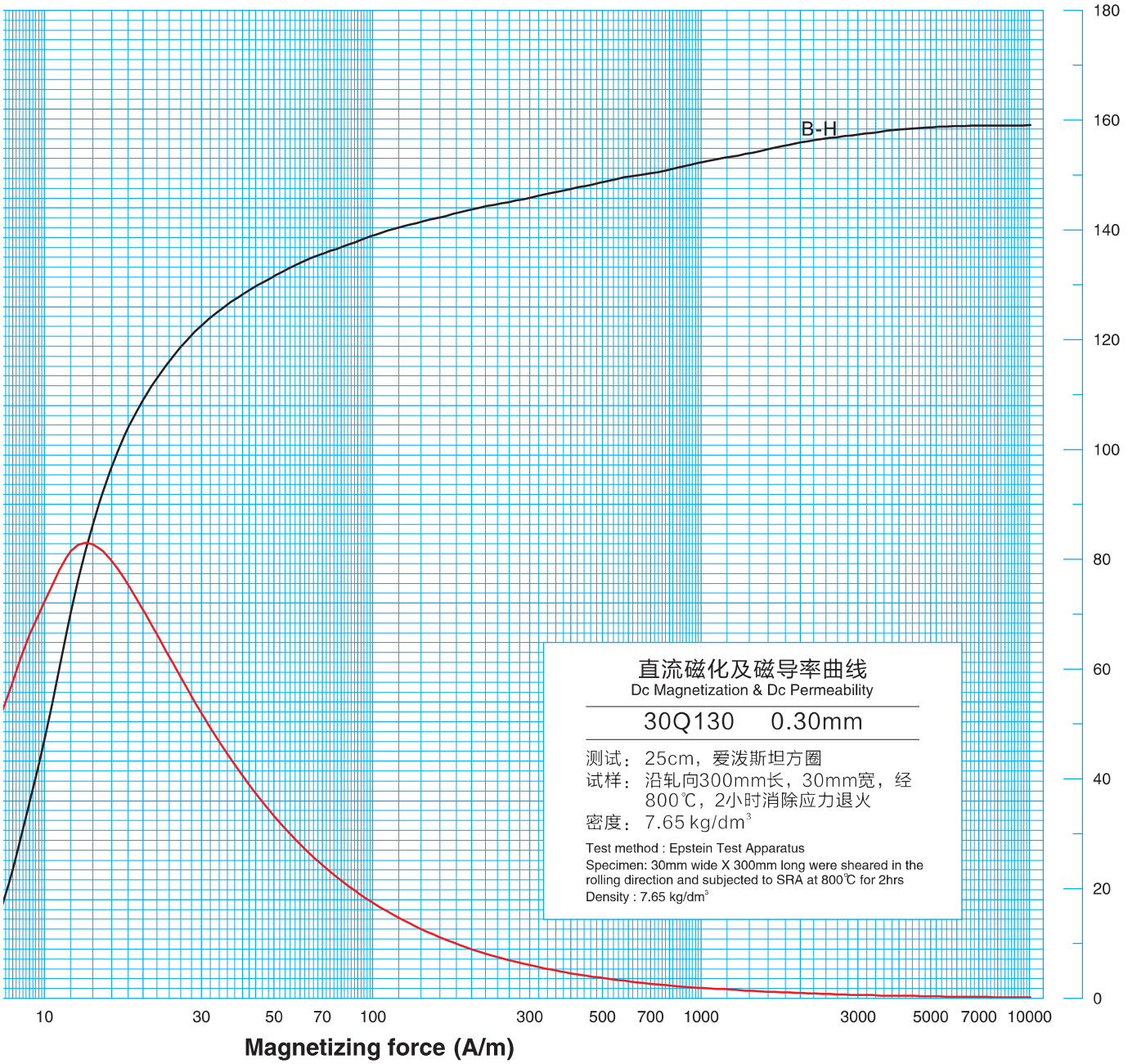
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.072	0.104	0.095	0.132	1.62	1.042	1.250	1.369	1.610
0.50	0.108	0.149	0.143	0.190	1.63	1.059	1.283	1.390	1.647
0.60	0.151	0.198	0.199	0.253	1.64	1.077	1.314	1.411	1.688
0.70	0.200	0.252	0.262	0.324	1.65	1.094	1.352	1.434	1.734
0.80	0.255	0.312	0.335	0.401	1.66	1.113	1.392	1.457	1.782
0.90	0.318	0.377	0.416	0.487	1.67	1.131	1.435	1.481	1.834
1.00	0.388	0.449	0.508	0.583	1.68	1.151	1.484	1.505	1.894
1.10	0.467	0.530	0.613	0.688	1.69	1.172	1.537	1.531	1.957
1.20	0.553	0.618	0.728	0.806	1.70	1.194	1.596	1.558	2.030
1.30	0.648	0.720	0.856	0.941	1.71	1.217	1.669	1.586	2.112
1.40	0.753	0.839	0.995	1.095	1.72	1.241	1.748	1.615	2.209
1.50	0.872	0.986	1.150	1.283	1.73	1.267	1.841	1.647	2.318
1.51	0.885	1.003	1.167	1.305	1.74	1.293	1.954	1.681	2.450
1.52	0.898	1.021	1.184	1.327	1.75	1.322	2.083	1.717	2.604
1.53	0.911	1.040	1.201	1.350	1.76	1.353	2.240	1.755	2.791
1.54	0.925	1.059	1.218	1.373	1.77	1.387	2.429	1.796	3.015
1.55	0.938	1.079	1.235	1.400	1.78	1.421	2.658	1.840	3.293
1.56	0.952	1.099	1.254	1.425	1.79	1.461	2.944	1.887	3.634
1.57	0.966	1.122	1.272	1.450	1.80	1.499	3.300	1.938	4.060
1.58	0.980	1.145	1.290	1.481	1.85	1.734	6.792	2.233	8.269
1.59	0.996	1.169	1.309	1.509	1.90	1.984	16.123	2.540	19.444
1.60	1.011	1.193	1.329	1.541	1.91	2.046	20.873	2.624	25.202
1.61	1.026	1.221	1.349	1.576	1.92	2.073	22.908	2.660	27.670

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.032	10	0.727	60	1.689	402	1.839	3017	1.949
3	0.070	12	0.983	70	1.707	502	1.852	4020	1.959
4	0.114	15	1.227	80	1.721	603	1.863	5026	1.963
5	0.170	18	1.359	90	1.733	703	1.870	6031	1.965
6	0.247	20	1.415	100	1.744	804	1.878	7037	1.966
7	0.342	30	1.563	151	1.777	1005	1.893	8043	1.967
8	0.466	40	1.625	201	1.797	1508	1.915	9048	1.967
9	0.601	50	1.662	302	1.821	2011	1.933	10048	1.968


60Hz
50Hz
铁损曲线
Core Loss
30Q130 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30Q130


60Hz
50Hz
励磁功率曲线
Exciting Power
30Q130 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

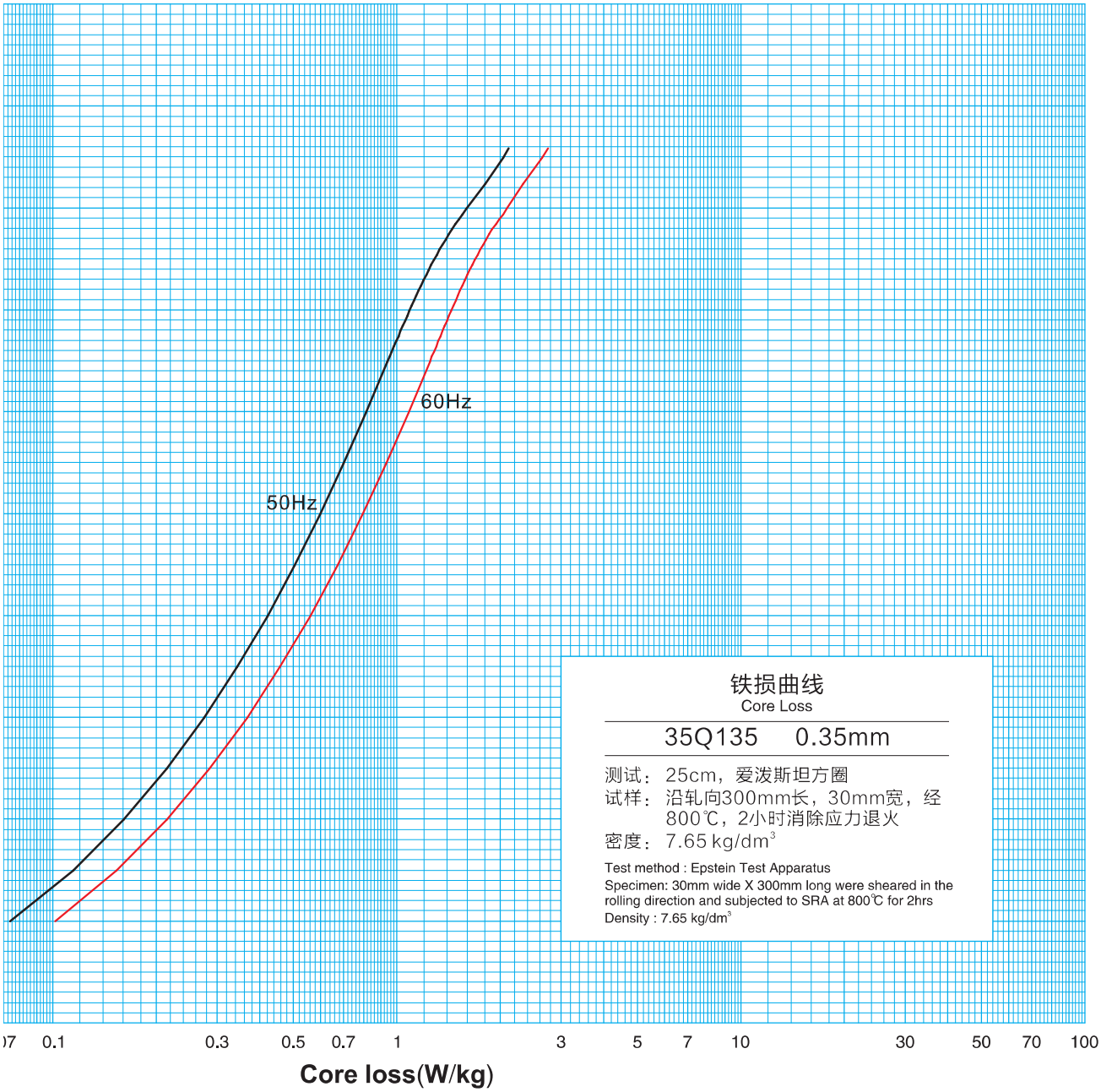

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30Q130 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

30Q130

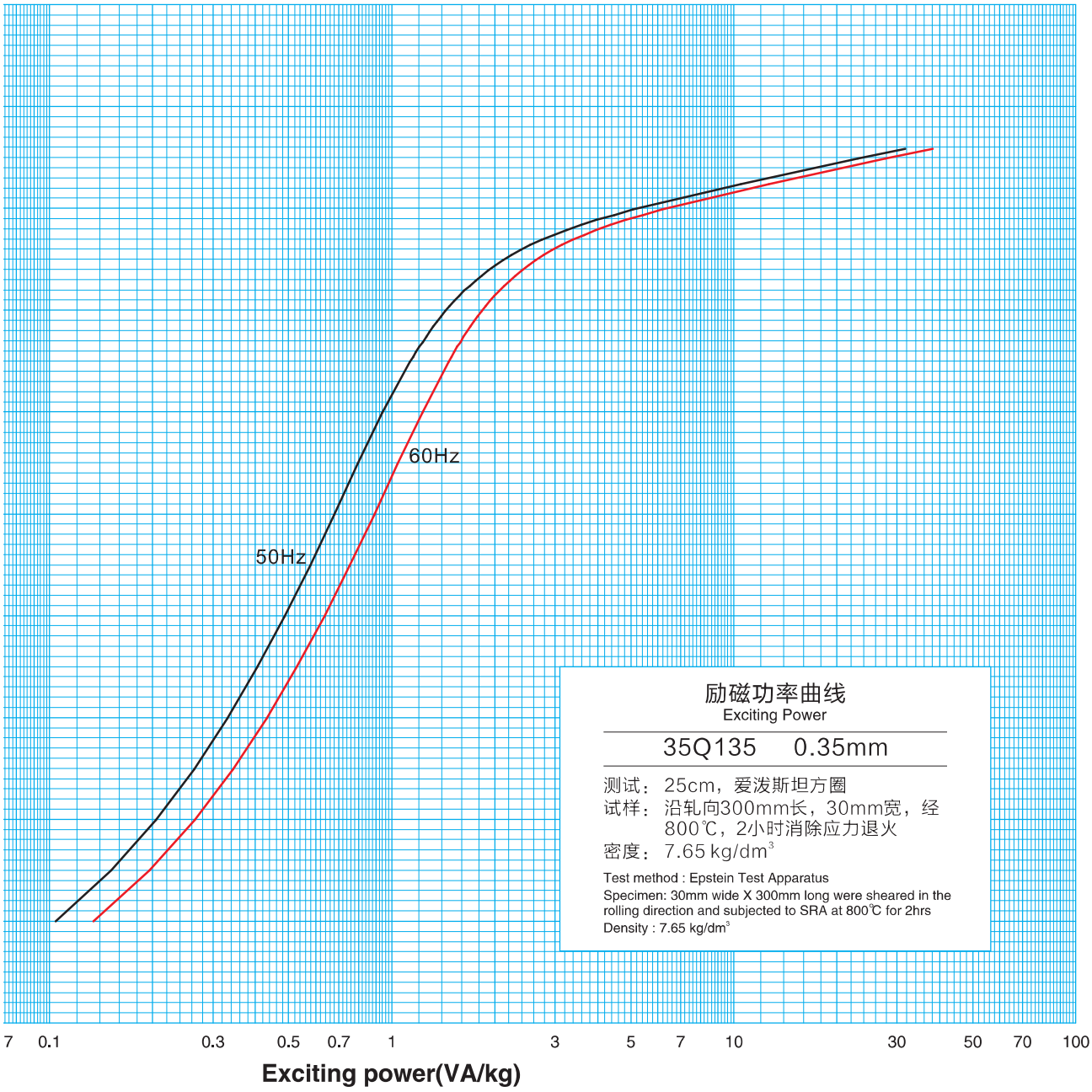
35Q135

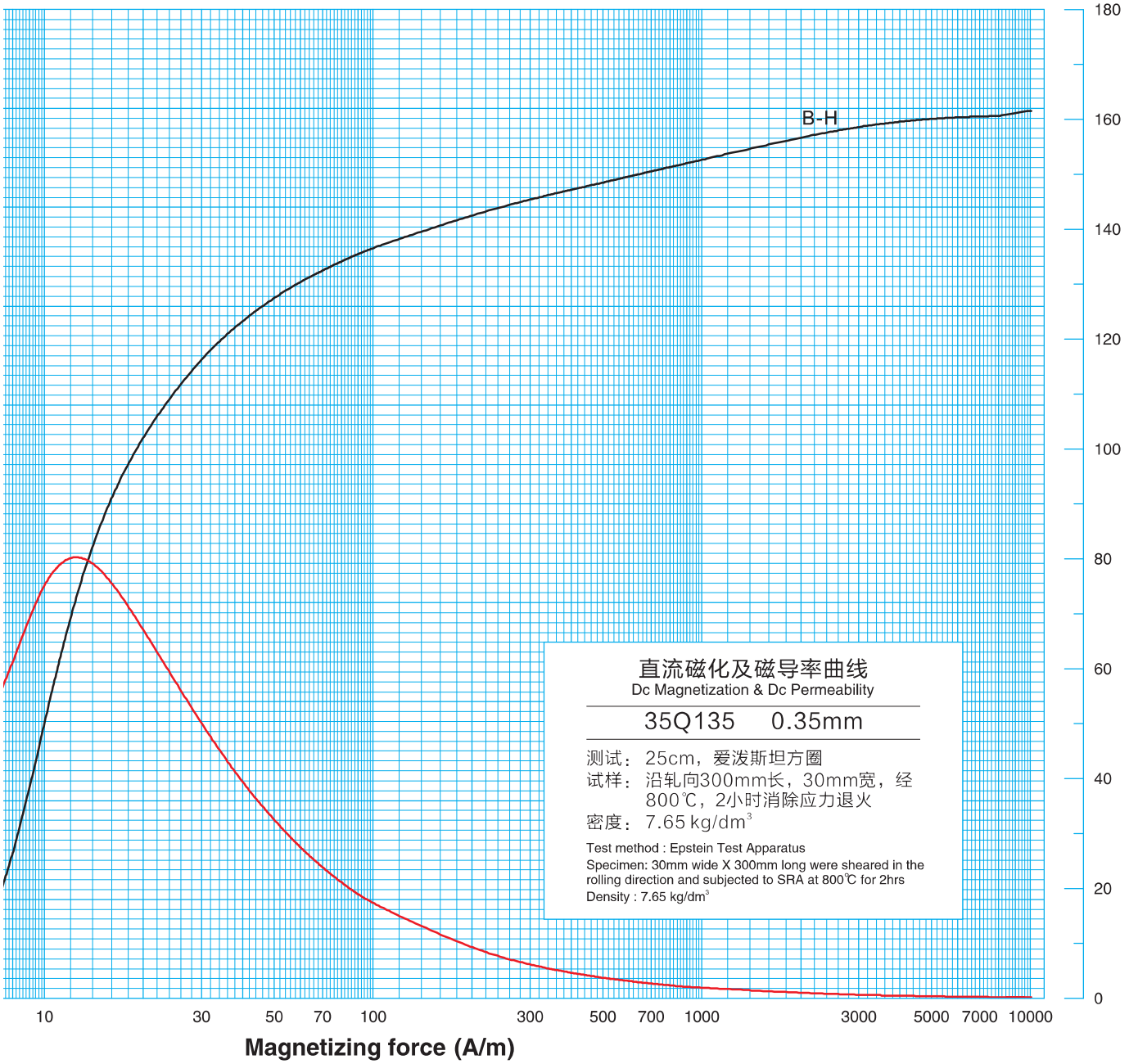
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.075	0.104	0.102	0.134	1.62	1.122	1.525	1.483	1.937
0.50	0.115	0.151	0.154	0.196	1.63	1.141	1.576	1.506	1.997
0.60	0.161	0.204	0.215	0.266	1.64	1.158	1.629	1.529	2.063
0.70	0.215	0.264	0.286	0.344	1.65	1.177	1.691	1.553	2.132
0.80	0.276	0.330	0.367	0.431	1.66	1.196	1.757	1.577	2.212
0.90	0.344	0.404	0.457	0.528	1.67	1.217	1.831	1.603	2.297
1.00	0.420	0.485	0.559	0.635	1.68	1.237	1.914	1.630	2.399
1.10	0.505	0.577	0.672	0.754	1.69	1.260	2.009	1.657	2.511
1.20	0.599	0.679	0.796	0.888	1.70	1.282	2.116	1.687	2.634
1.30	0.701	0.797	0.931	1.042	1.71	1.306	2.238	1.717	2.781
1.40	0.814	0.940	1.081	1.227	1.72	1.331	2.381	1.749	2.947
1.50	0.939	1.131	1.246	1.465	1.73	1.357	2.547	1.782	3.146
1.51	0.953	1.155	1.265	1.493	1.74	1.387	2.742	1.817	3.377
1.52	0.967	1.180	1.283	1.524	1.75	1.414	2.975	1.855	3.648
1.53	0.981	1.206	1.301	1.555	1.76	1.445	3.249	1.894	3.961
1.54	0.996	1.233	1.320	1.588	1.77	1.480	3.578	1.941	4.358
1.55	1.011	1.261	1.339	1.622	1.78	1.518	3.980	1.987	4.840
1.56	1.025	1.292	1.358	1.659	1.79	1.553	4.479	2.036	5.434
1.57	1.041	1.324	1.378	1.698	1.80	1.592	5.074	2.084	6.152
1.58	1.056	1.359	1.398	1.740	1.85	1.812	10.484	2.336	12.644
1.59	1.073	1.396	1.418	1.783	1.90	2.038	23.051	2.644	27.727
1.60	1.088	1.435	1.440	1.831	1.91	2.091	29.138	2.722	35.019
1.61	1.105	1.479	1.461	1.883	1.92	2.114	31.746	2.756	38.144

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.045	10	0.759	70	1.672	599	1.862	5992	1.983
3	0.086	12	0.979	80	1.690	699	1.872	6990	1.984
4	0.138	15	1.180	90	1.705	799	1.881	7991	1.985
5	0.195	20	1.345	100	1.719	998	1.896	8989	1.986
6	0.265	30	1.497	200	1.785	1997	1.942	9990	1.987
7	0.366	40	1.570	300	1.816	2998	1.963	8043	1.993
8	0.487	50	1.617	399	1.835	3995	1.973	9048	1.993
9	0.621	60	1.649	499	1.850	4995	1.978	10055	1.995


60Hz
50Hz
铁损曲线
Core Loss
35Q135 0.35mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

35Q135


60Hz
50Hz
励磁功率曲线
Exciting Power
35Q135 0.35mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

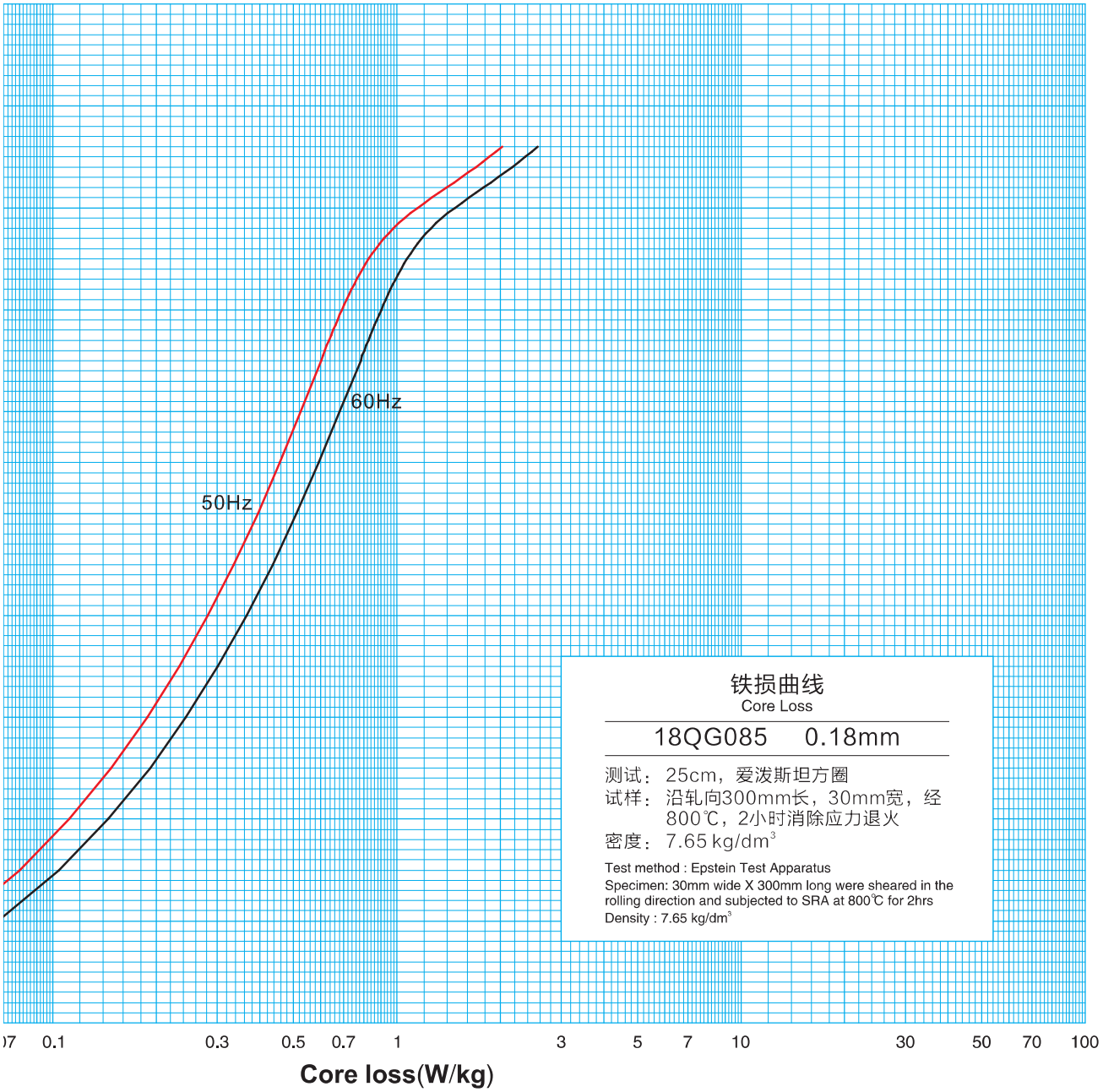

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
35Q135 0.35mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

35Q135

18QG085

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.053	0.094	0.069	0.117	1.66	0.765	1.096	0.992	1.373
0.50	0.080	0.134	0.104	0.167	1.67	0.780	1.132	1.009	1.412
0.60	0.112	0.178	0.145	0.222	1.68	0.795	1.170	1.029	1.460
0.70	0.148	0.225	0.192	0.282	1.69	0.811	1.213	1.050	1.512
0.80	0.188	0.276	0.244	0.347	1.70	0.828	1.261	1.071	1.569
0.90	0.233	0.330	0.302	0.415	1.71	0.848	1.317	1.095	1.635
1.00	0.282	0.388	0.365	0.489	1.72	0.869	1.380	1.120	1.709
1.10	0.335	0.450	0.435	0.569	1.73	0.892	1.452	1.149	1.794
1.20	0.394	0.519	0.511	0.654	1.74	0.916	1.532	1.181	1.894
1.30	0.458	0.594	0.593	0.749	1.75	0.944	1.628	1.216	2.007
1.40	0.525	0.677	0.681	0.856	1.76	0.976	1.740	1.257	2.142
1.50	0.602	0.783	0.784	0.993	1.77	1.011	1.870	1.301	2.297
1.51	0.609	0.796	0.793	1.006	1.78	1.052	2.025	1.351	2.483
1.52	0.617	0.809	0.803	1.023	1.79	1.097	2.206	1.407	2.705
1.53	0.625	0.823	0.814	1.039	1.80	1.147	2.427	1.471	2.973
1.54	0.634	0.838	0.825	1.058	1.81	1.204	2.698	1.544	3.293
1.55	0.643	0.853	0.838	1.077	1.82	1.261	3.022	1.618	3.684
1.56	0.653	0.868	0.850	1.096	1.83	1.323	3.420	1.700	4.171
1.57	0.662	0.884	0.862	1.116	1.84	1.393	3.936	1.782	4.771
1.58	0.672	0.902	0.874	1.137	1.85	1.466	4.571	1.875	5.526
1.59	0.682	0.921	0.887	1.160	1.86	1.541	5.381	1.969	6.520
1.60	0.693	0.941	0.901	1.184	1.87	1.616	6.412	2.065	7.757
1.61	0.703	0.961	0.914	1.209	1.88	1.696	7.675	2.160	9.231
1.62	0.715	0.984	0.928	1.237	1.89	1.775	9.282	2.260	11.181
1.63	0.726	1.009	0.943	1.266	1.90	1.856	11.290	2.359	13.557
1.64	0.738	1.035	0.958	1.298	1.91	1.937	13.810	2.462	16.590
1.65	0.752	1.065	0.974	1.333	1.92	2.021	16.947	2.561	20.368

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.037	12	0.909	80	1.757	703	1.897	6032	1.957
3	0.069	15	1.215	90	1.769	804	1.904	7038	1.958
4	0.103	18	1.384	100	1.778	904	1.910	8043	1.958
5	0.146	20	1.450	151	1.811	1004	1.914	9055	1.960
6	0.209	30	1.605	201	1.830	1508	1.931	10056	1.961
7	0.286	40	1.664	302	1.854	2011	1.941		
8	0.394	50	1.699	402	1.870	3017	1.949		
9	0.518	60	1.725	502	1.881	4019	1.953		
10	0.638	70	1.742	603	1.890	5025	1.956		



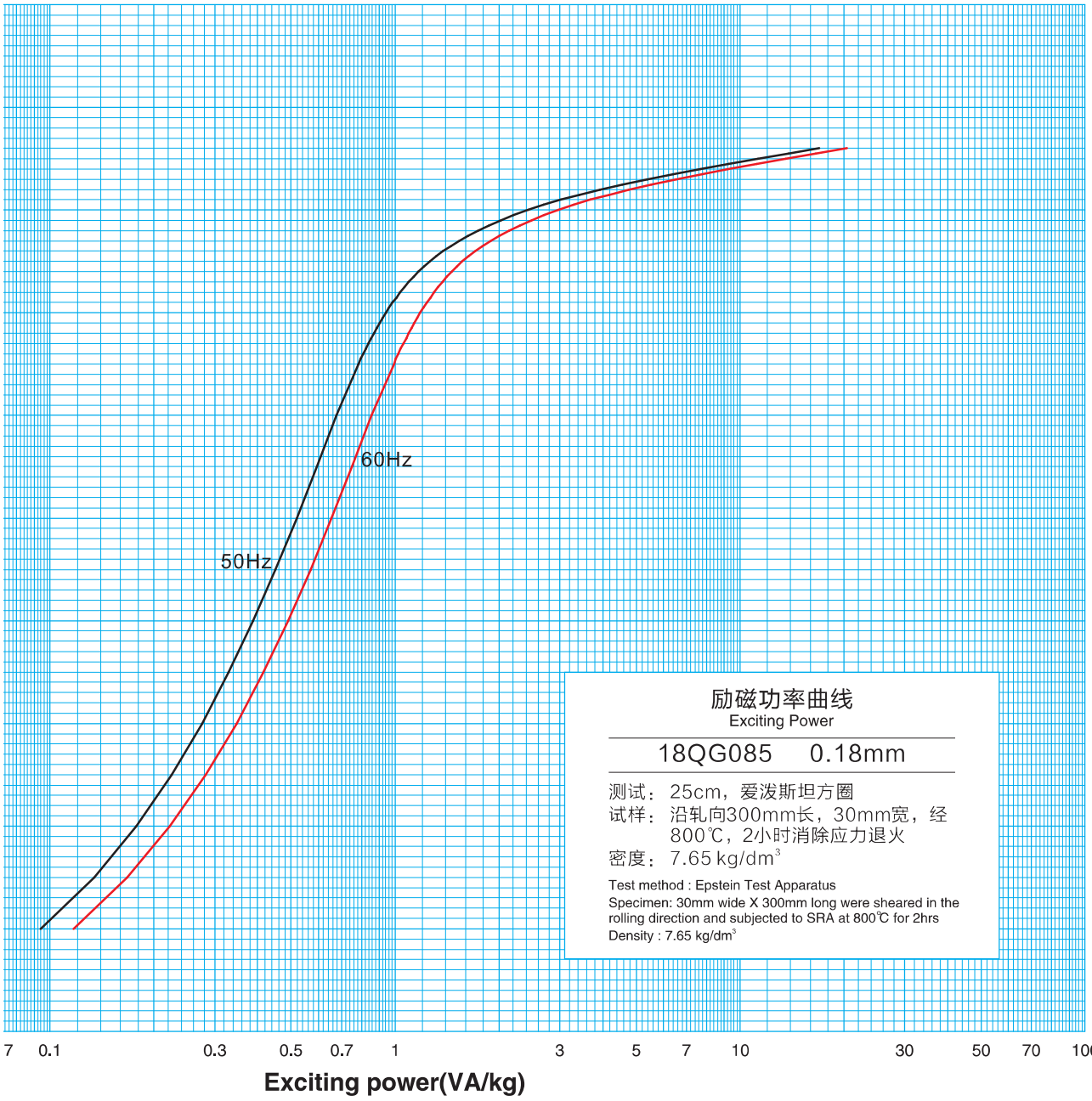
铁损曲线
Core Loss

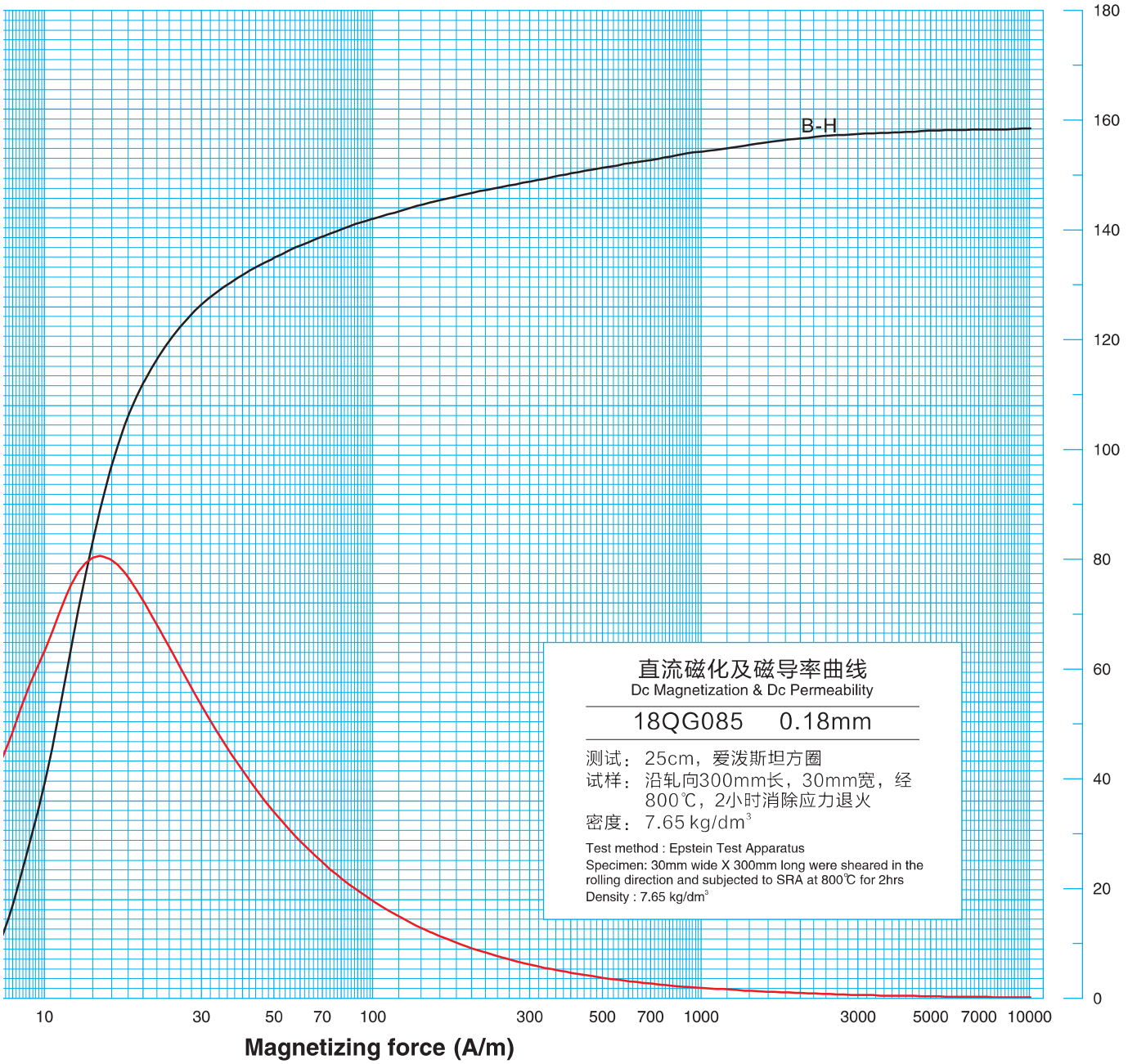
18QG085 0.18mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

18QG085


60Hz
50Hz
励磁功率曲线
Exciting Power
18QG085 0.18mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

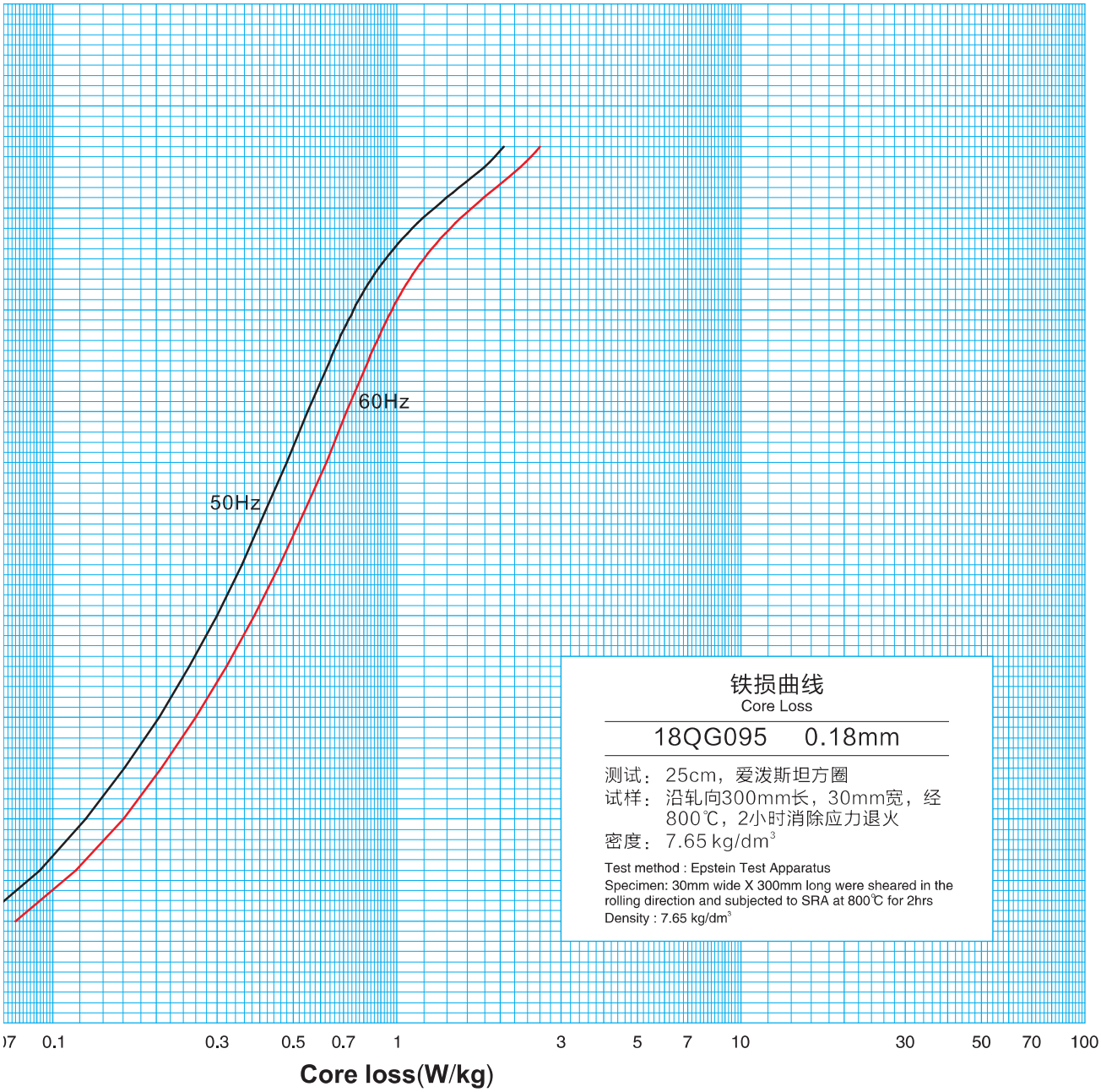

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
18QG085 0.18mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

18QG085

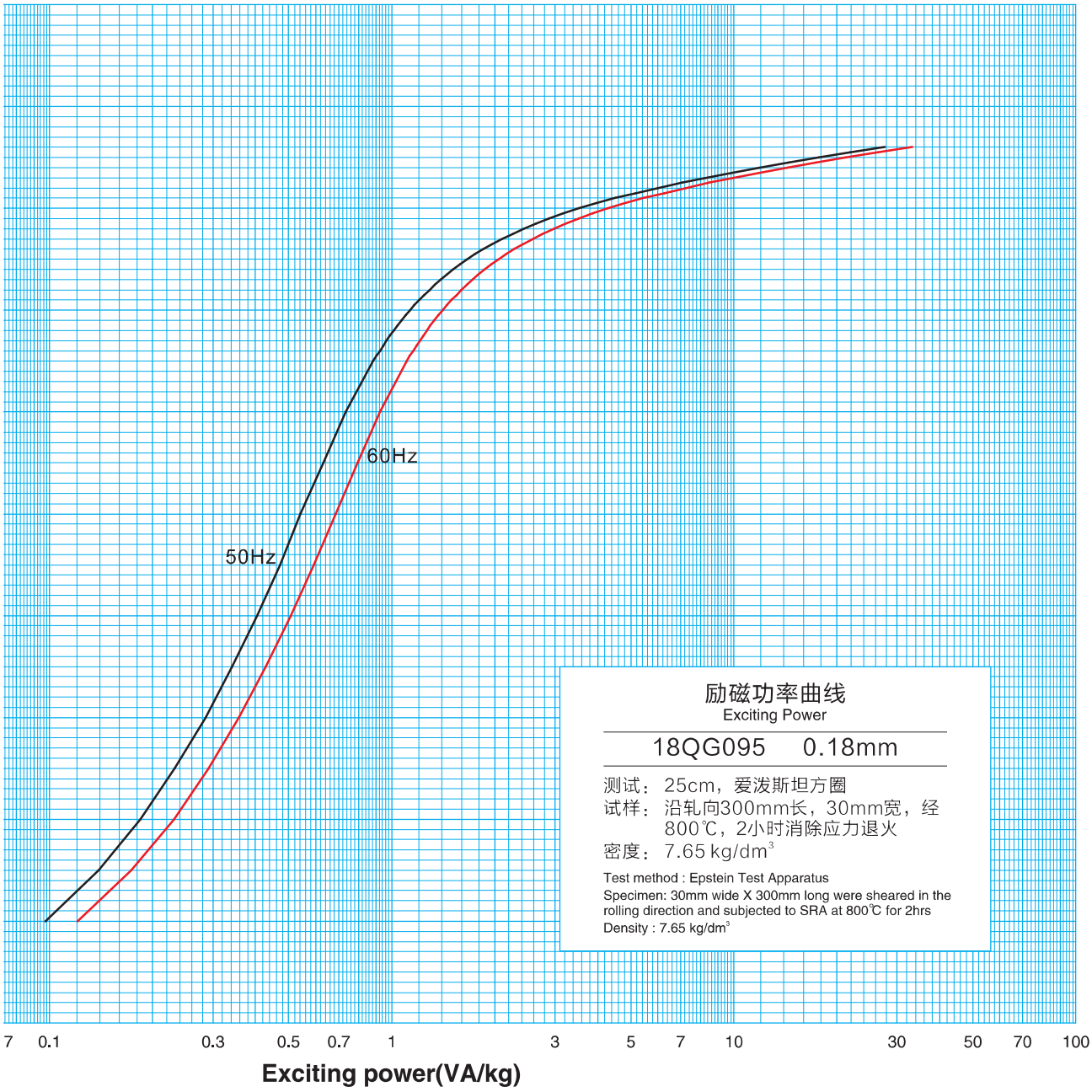
18QG095

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.062	0.097	0.078	0.121	1.66	0.843	1.392	1.090	1.723
0.50	0.092	0.139	0.117	0.173	1.67	0.862	1.449	1.113	1.793
0.60	0.125	0.184	0.161	0.231	1.68	0.883	1.514	1.140	1.870
0.70	0.161	0.232	0.207	0.291	1.69	0.905	1.586	1.167	1.956
0.80	0.204	0.286	0.260	0.357	1.70	0.928	1.664	1.197	2.054
0.90	0.249	0.342	0.320	0.429	1.71	0.954	1.754	1.229	2.161
1.00	0.300	0.404	0.386	0.508	1.72	0.979	1.853	1.264	2.284
1.10	0.354	0.470	0.456	0.591	1.73	1.009	1.969	1.301	2.420
1.20	0.412	0.542	0.536	0.687	1.74	1.040	2.099	1.341	2.580
1.30	0.480	0.631	0.624	0.797	1.75	1.075	2.253	1.383	2.759
1.40	0.551	0.734	0.715	0.925	1.76	1.110	2.428	1.431	2.973
1.50	0.639	0.884	0.826	1.107	1.77	1.149	2.636	1.480	3.219
1.51	0.648	0.903	0.837	1.130	1.78	1.192	2.881	1.534	3.515
1.52	0.658	0.924	0.850	1.155	1.79	1.239	3.178	1.592	3.872
1.53	0.668	0.944	0.864	1.181	1.80	1.287	3.529	1.653	4.297
1.54	0.678	0.966	0.878	1.208	1.81	1.339	3.968	1.720	4.818
1.55	0.688	0.989	0.892	1.237	1.82	1.395	4.504	1.788	5.456
1.56	0.700	1.015	0.906	1.266	1.83	1.455	5.163	1.863	6.247
1.57	0.711	1.040	0.920	1.298	1.84	1.517	5.989	1.943	7.250
1.58	0.724	1.069	0.935	1.331	1.85	1.591	7.090	2.028	8.491
1.59	0.737	1.099	0.951	1.369	1.86	1.654	8.278	2.114	9.983
1.60	0.749	1.131	0.968	1.409	1.87	1.724	9.888	2.201	11.885
1.61	0.762	1.166	0.986	1.450	1.88	1.794	11.892	2.289	14.328
1.62	0.778	1.205	1.005	1.496	1.89	1.860	14.408	2.373	17.356
1.63	0.792	1.244	1.025	1.546	1.90	1.927	17.683	2.453	21.221
1.64	0.808	1.289	1.045	1.599	1.91	1.986	21.858	2.530	26.317
1.65	0.825	1.338	1.066	1.657	1.92	2.043	27.615	2.600	33.212

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.024	10	0.616	60	1.672	402	1.851	3017	1.940
3	0.058	12	0.821	70	1.696	502	1.863	4019	1.947
4	0.119	15	1.068	80	1.716	603	1.872	5025	1.952
5	0.169	18	1.241	90	1.731	703	1.881	6030	1.955
6	0.241	20	1.315	100	1.743	803	1.888	7036	1.957
7	0.323	30	1.507	151	1.783	1004	1.899	8042	1.960
8	0.418	40	1.589	201	1.805	1508	1.917	9048	1.961
9	0.519	50	1.638	302	1.833	2011	1.929	10057	1.963


60Hz
50Hz
铁损曲线
Core Loss
18QG095 0.18mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

18QG095

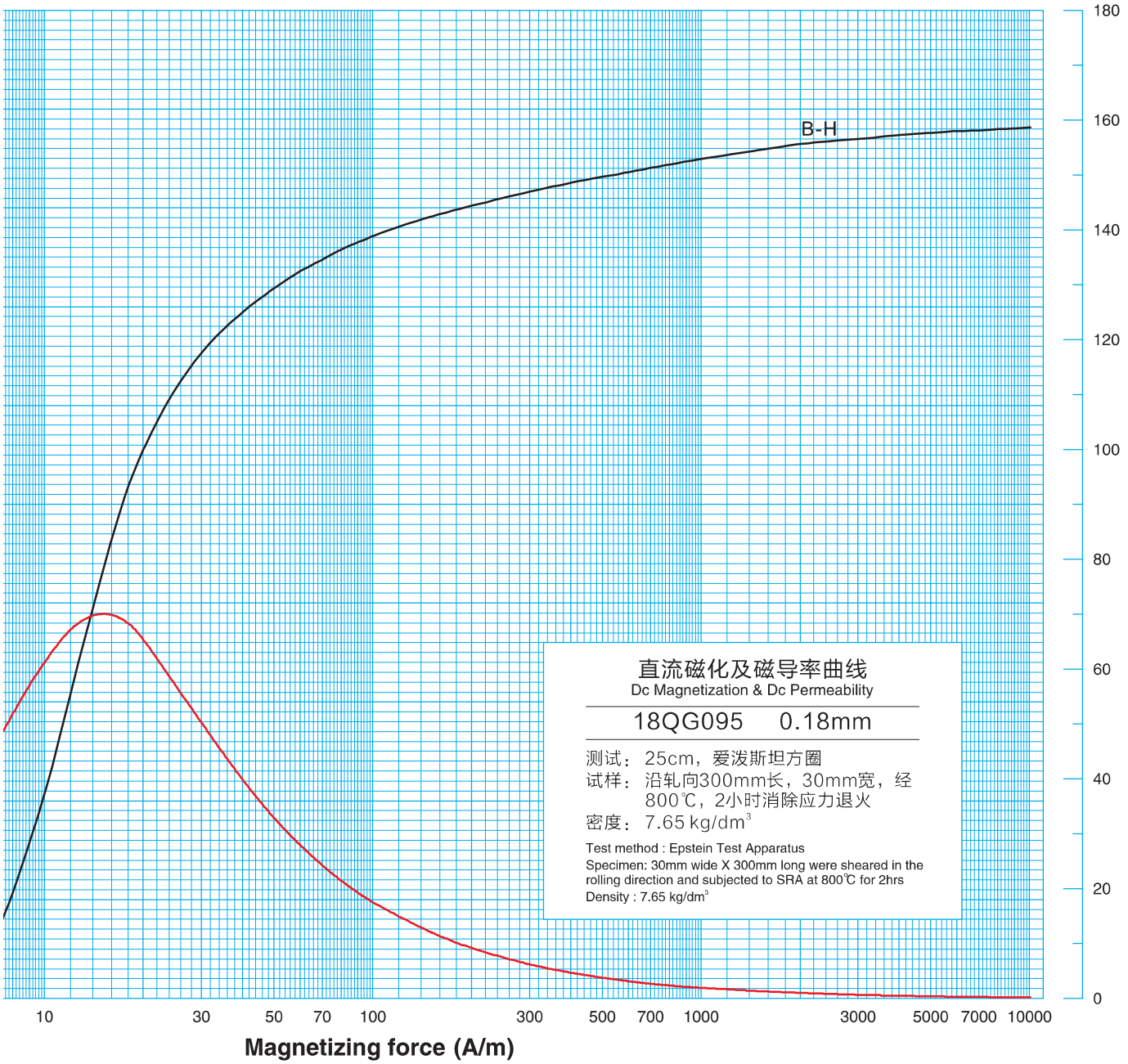


励磁功率曲线
Exciting Power

18QG095 0.18mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

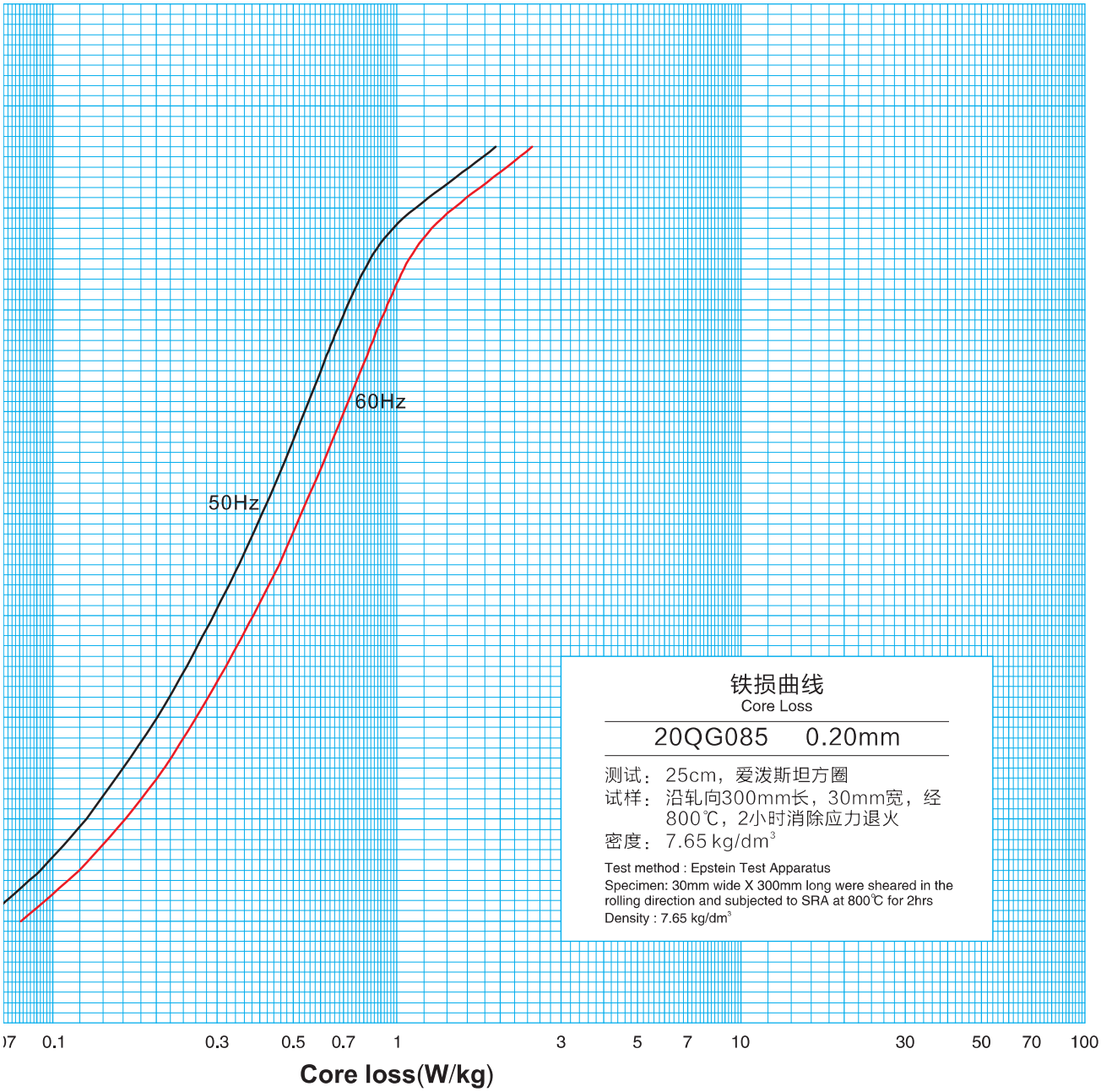

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
18QG095 0.18mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

18QG095

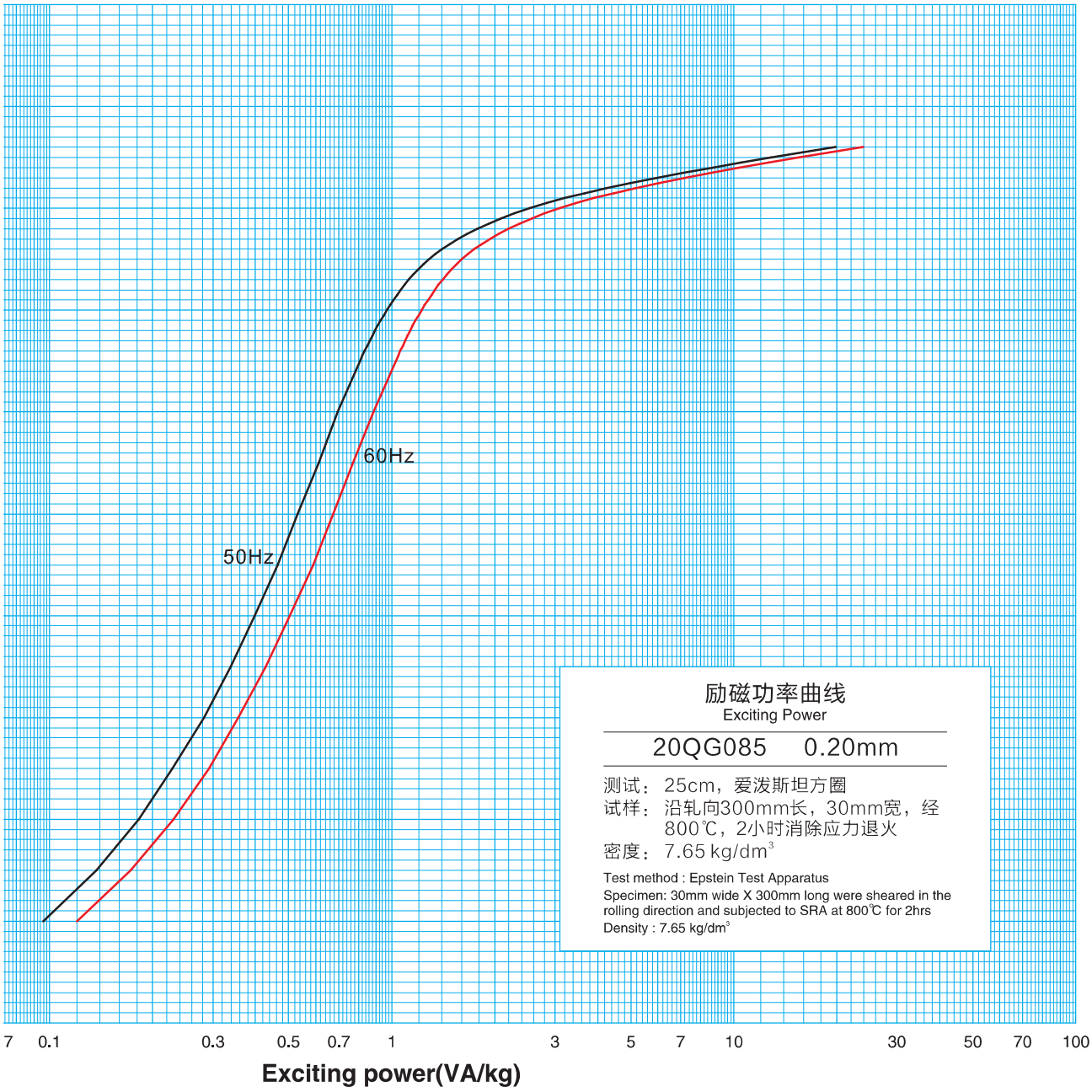
20QG085

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.063	0.096	0.081	0.120	1.66	0.779	1.122	1.014	1.409
0.50	0.092	0.137	0.119	0.173	1.67	0.793	1.156	1.030	1.449
0.60	0.125	0.182	0.163	0.230	1.68	0.807	1.195	1.047	1.494
0.70	0.160	0.229	0.212	0.293	1.69	0.823	1.238	1.067	1.546
0.80	0.201	0.282	0.261	0.356	1.70	0.837	1.285	1.089	1.605
0.90	0.245	0.338	0.319	0.428	1.71	0.855	1.340	1.111	1.671
1.00	0.293	0.397	0.382	0.504	1.72	0.875	1.405	1.135	1.744
1.10	0.348	0.464	0.454	0.589	1.73	0.896	1.476	1.164	1.833
1.20	0.405	0.531	0.527	0.673	1.74	0.920	1.560	1.194	1.935
1.30	0.472	0.612	0.612	0.772	1.75	0.946	1.659	1.227	2.050
1.40	0.539	0.696	0.703	0.884	1.76	0.977	1.778	1.265	2.192
1.50	0.618	0.807	0.809	1.027	1.77	1.010	1.917	1.308	2.359
1.51	0.626	0.820	0.820	1.044	1.78	1.046	2.084	1.356	2.560
1.52	0.634	0.833	0.830	1.059	1.79	1.089	2.286	1.407	2.798
1.53	0.643	0.848	0.842	1.078	1.80	1.134	2.529	1.466	3.093
1.54	0.652	0.862	0.853	1.097	1.81	1.186	2.835	1.530	3.456
1.55	0.661	0.879	0.864	1.113	1.82	1.238	3.204	1.597	3.898
1.56	0.671	0.894	0.874	1.132	1.83	1.294	3.667	1.669	4.456
1.57	0.680	0.911	0.887	1.153	1.84	1.354	4.244	1.745	5.162
1.58	0.690	0.929	0.900	1.175	1.85	1.417	4.996	1.826	6.047
1.59	0.700	0.948	0.913	1.198	1.86	1.485	5.948	1.908	7.192
1.60	0.710	0.967	0.926	1.223	1.87	1.554	7.106	1.995	8.579
1.61	0.720	0.989	0.940	1.249	1.88	1.624	8.677	2.085	10.377
1.62	0.731	1.011	0.953	1.275	1.89	1.700	10.502	2.177	12.617
1.63	0.743	1.035	0.968	1.305	1.90	1.779	12.862	2.273	15.480
1.64	0.754	1.062	0.982	1.336	1.91	1.858	15.875	2.374	19.139
1.65	0.767	1.090	0.997	1.370	1.92	1.936	19.864	2.471	23.927

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.024	12	0.852	80	1.759	703	1.898	7037	1.961
3	0.059	15	1.169	90	1.770	803	1.905	8042	1.963
4	0.104	18	1.349	100	1.780	1004	1.914	9048	1.963
5	0.149	20	1.424	151	1.812	1508	1.932	10048	1.964
6	0.211	30	1.597	201	1.831	2011	1.941		
7	0.289	40	1.663	302	1.855	3017	1.950		
8	0.380	50	1.701	402	1.870	4020	1.954		
9	0.493	60	1.725	502	1.882	5026	1.957		
10	0.603	70	1.745	603	1.890	6031	1.959		


60Hz
50Hz
铁损曲线
Core Loss
20QG085 0.20mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
)7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

20QG085

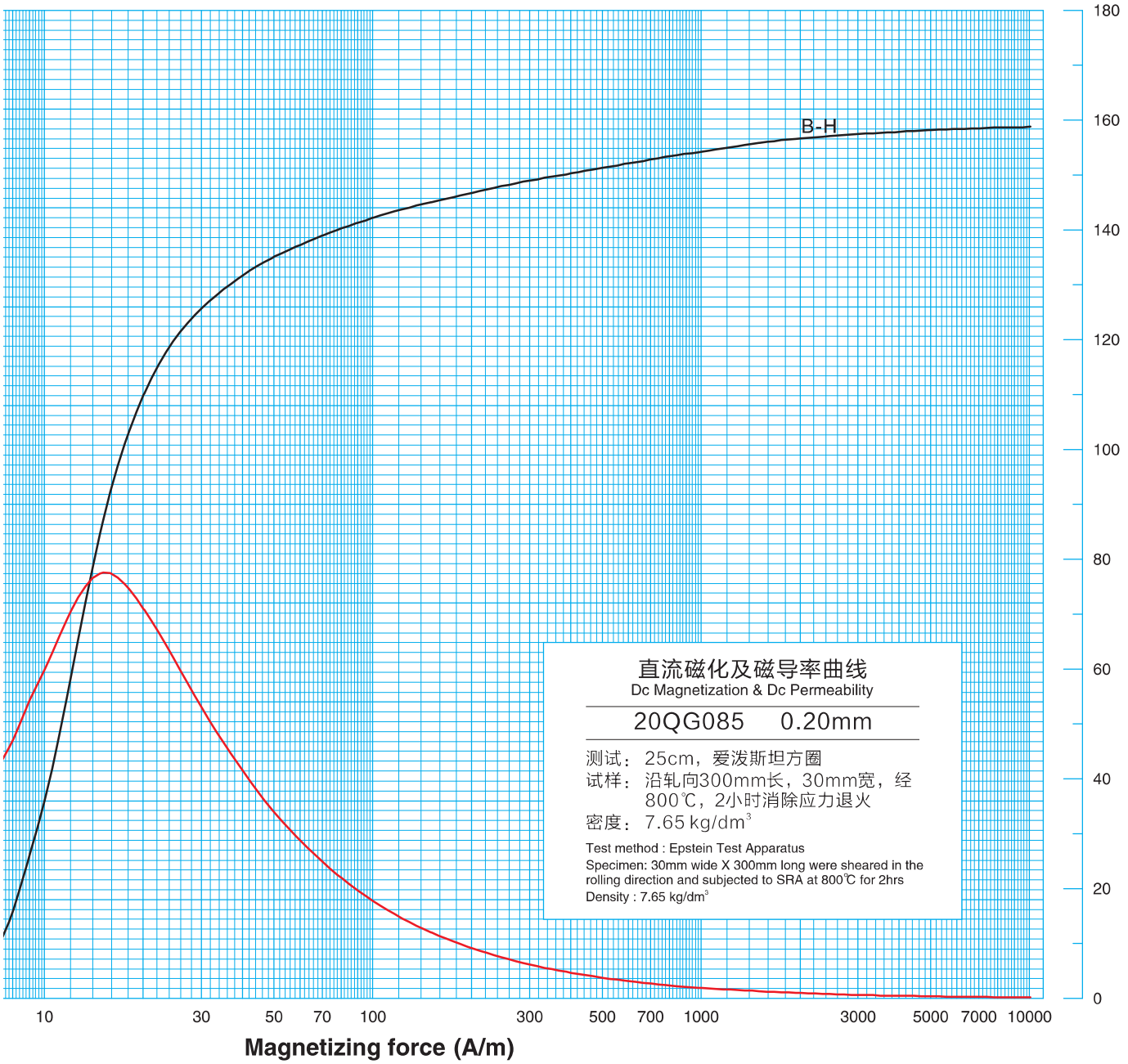


励磁功率曲线
Exciting Power

20QG085 0.20mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

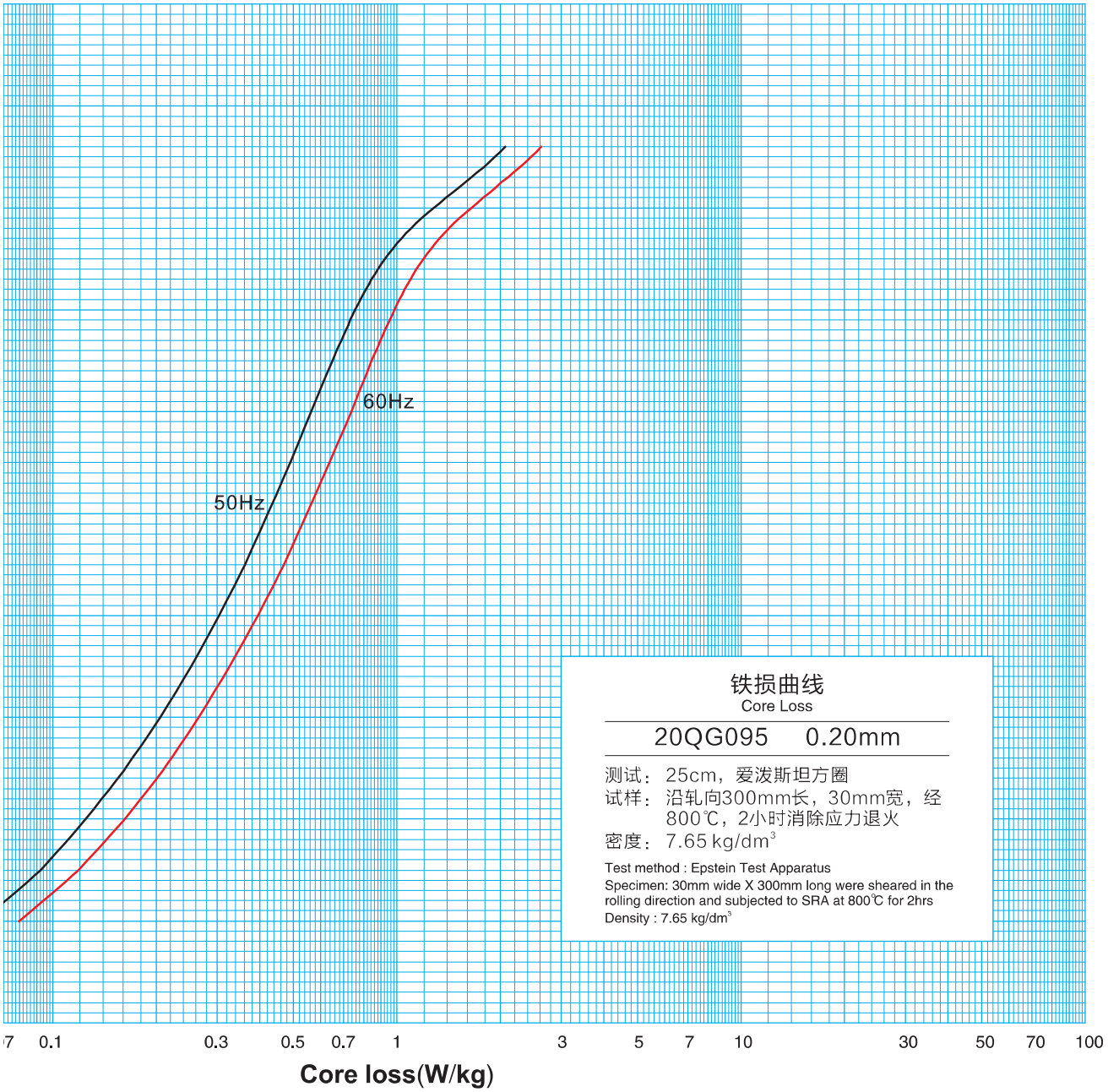

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
20QG085 0.20mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

20QG085

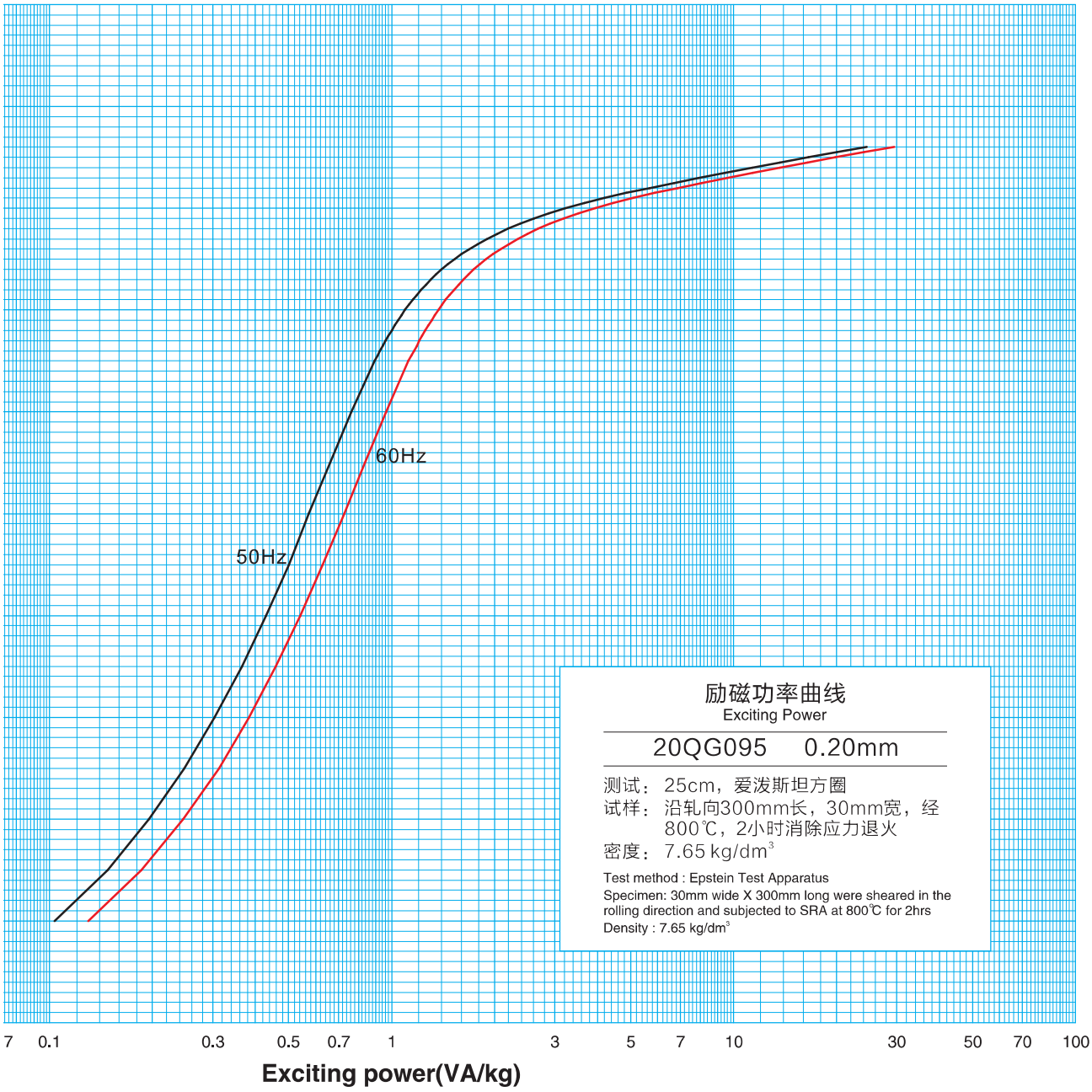
20QG095

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.062	0.104	0.080	0.130	1.66	0.845	1.303	1.096	1.622
0.50	0.092	0.148	0.119	0.186	1.67	0.863	1.350	1.119	1.680
0.60	0.125	0.195	0.162	0.246	1.68	0.881	1.403	1.141	1.740
0.70	0.163	0.248	0.212	0.313	1.69	0.902	1.460	1.166	1.811
0.80	0.205	0.304	0.265	0.383	1.70	0.924	1.527	1.195	1.893
0.90	0.253	0.365	0.327	0.459	1.71	0.947	1.603	1.225	1.982
1.00	0.304	0.429	0.395	0.542	1.72	0.973	1.687	1.257	2.086
1.10	0.362	0.500	0.469	0.630	1.73	1.001	1.787	1.293	2.205
1.20	0.422	0.574	0.549	0.727	1.74	1.031	1.901	1.329	2.340
1.30	0.491	0.662	0.637	0.835	1.75	1.063	2.033	1.372	2.499
1.40	0.564	0.763	0.736	0.963	1.76	1.099	2.190	1.417	2.688
1.50	0.650	0.893	0.845	1.122	1.77	1.138	2.380	1.466	2.914
1.51	0.659	0.909	0.857	1.142	1.78	1.182	2.610	1.520	3.187
1.52	0.669	0.925	0.870	1.164	1.79	1.228	2.893	1.580	3.525
1.53	0.679	0.943	0.883	1.185	1.80	1.279	3.235	1.644	3.940
1.54	0.689	0.961	0.896	1.207	1.81	1.334	3.669	1.710	4.445
1.55	0.699	0.980	0.909	1.230	1.82	1.391	4.198	1.782	5.083
1.56	0.710	1.001	0.923	1.255	1.83	1.452	4.857	1.858	5.874
1.57	0.722	1.023	0.937	1.282	1.84	1.515	5.675	1.937	6.853
1.58	0.733	1.045	0.952	1.310	1.85	1.580	6.704	2.015	8.058
1.59	0.745	1.069	0.967	1.338	1.86	1.646	7.924	2.104	9.590
1.60	0.757	1.095	0.984	1.372	1.87	1.715	9.443	2.188	11.402
1.61	0.770	1.123	1.000	1.405	1.88	1.787	11.351	2.276	13.677
1.62	0.783	1.153	1.018	1.441	1.89	1.856	13.666	2.366	16.477
1.63	0.798	1.186	1.036	1.481	1.90	1.927	16.547	2.453	19.850
1.64	0.813	1.221	1.054	1.523	1.91	1.995	20.095	2.540	24.058
1.65	0.829	1.261	1.075	1.571	1.92	2.060	24.540	2.622	29.480

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.021	10	0.497	60	1.691	401	1.855	3017	1.951
3	0.053	12	0.689	70	1.714	502	1.867	4019	1.958
4	0.106	15	0.973	80	1.730	603	1.877	5025	1.961
5	0.142	18	1.195	90	1.744	703	1.885	6031	1.964
6	0.191	20	1.294	100	1.755	803	1.892	7036	1.965
7	0.250	30	1.530	151	1.791	1004	1.904	8044	1.966
8	0.318	40	1.614	201	1.811	1508	1.925	9047	1.968
9	0.407	50	1.661	302	1.839	2011	1.937	10055	1.969


60Hz
50Hz
铁损曲线
Core Loss
20QG095 0.20mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

20QG095

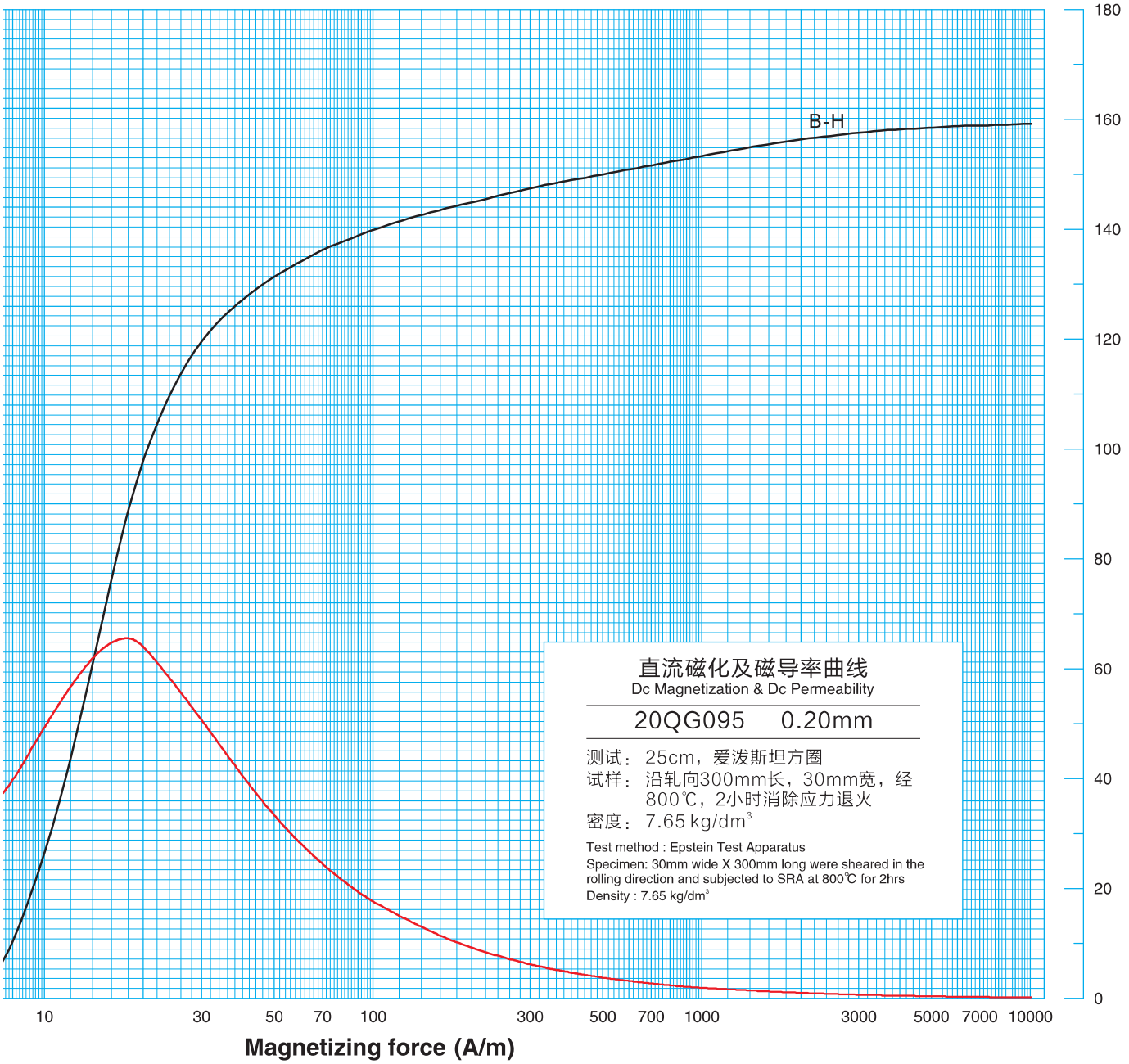


励磁功率曲线
Exciting Power

20QG095 0.20mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

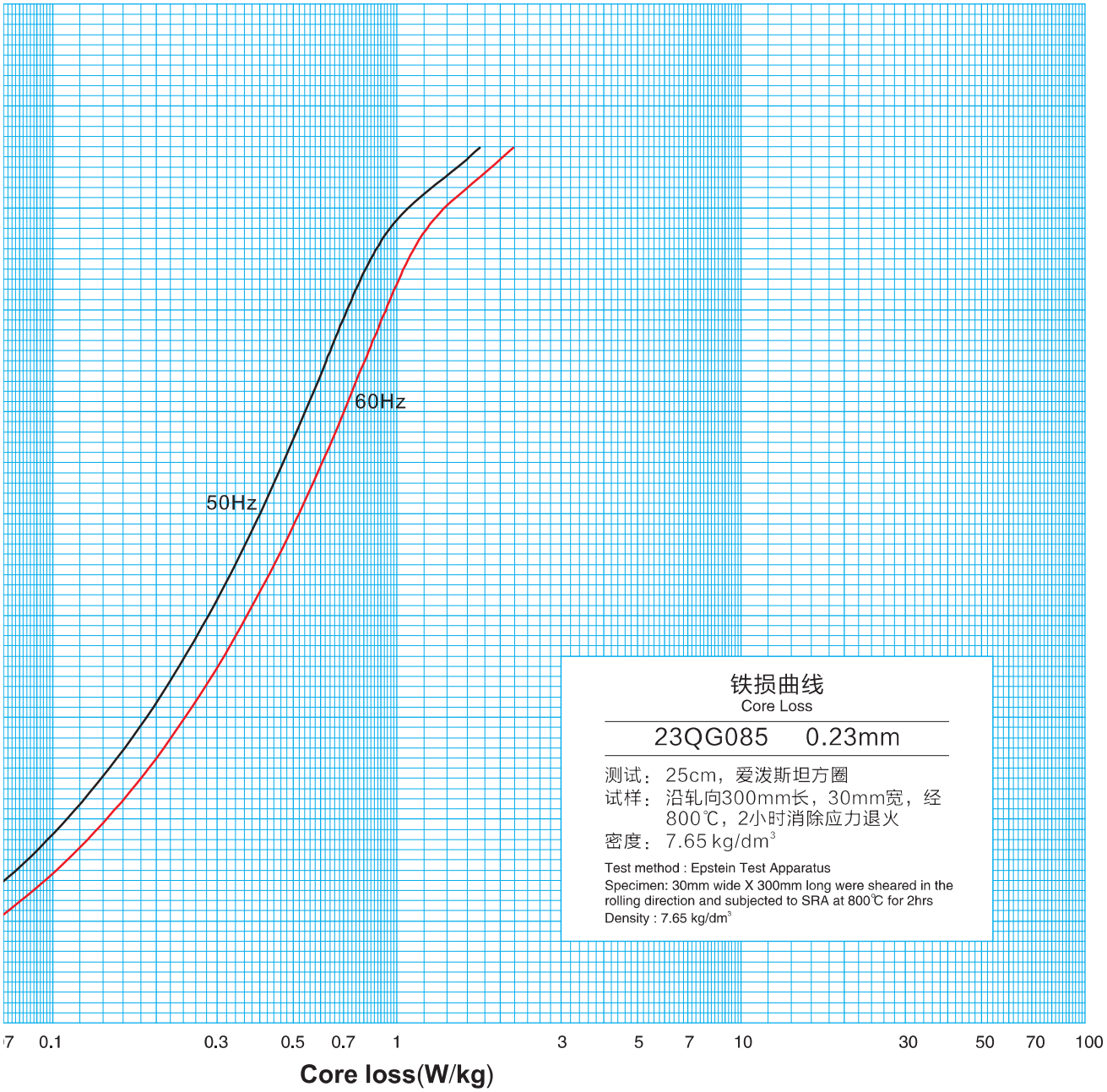

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
20QG095 0.20mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³

20QG095

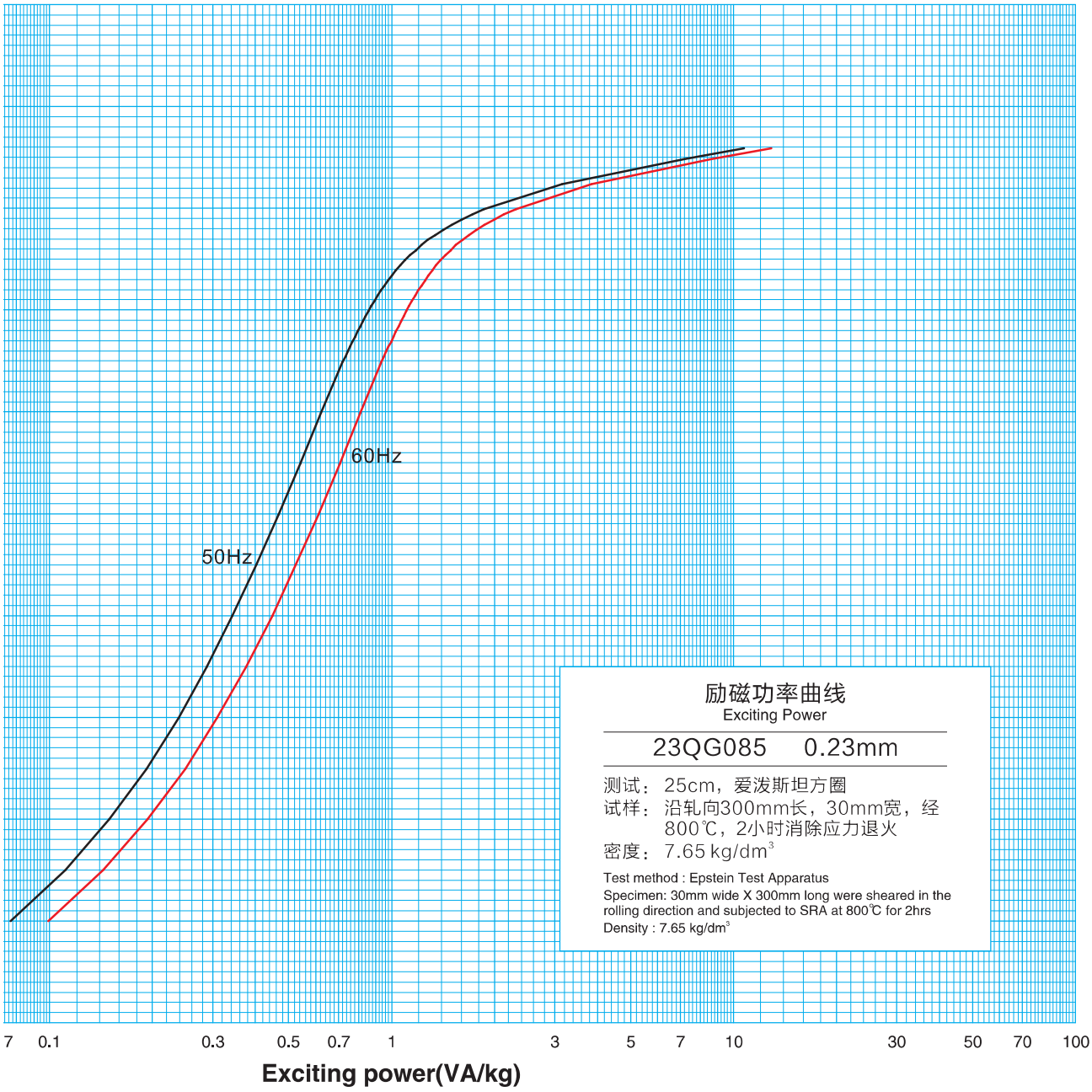
23QG085

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.052	0.077	0.068	0.099	1.62	0.737	0.892	0.953	1.147
0.50	0.078	0.111	0.102	0.143	1.63	0.747	0.910	0.967	1.171
0.60	0.110	0.150	0.143	0.194	1.64	0.759	0.931	0.981	1.196
0.70	0.146	0.192	0.190	0.249	1.65	0.770	0.951	0.996	1.223
0.80	0.187	0.238	0.242	0.309	1.66	0.783	0.976	1.011	1.250
0.90	0.232	0.288	0.301	0.375	1.67	0.795	1.001	1.027	1.281
1.00	0.283	0.343	0.366	0.447	1.68	0.809	1.029	1.042	1.315
1.10	0.339	0.403	0.439	0.525	1.69	0.823	1.061	1.060	1.350
1.20	0.399	0.468	0.519	0.612	1.70	0.838	1.094	1.078	1.392
1.30	0.466	0.541	0.606	0.706	1.71	0.852	1.133	1.096	1.437
1.40	0.540	0.622	0.701	0.811	1.72	0.869	1.177	1.117	1.488
1.50	0.621	0.721	0.806	0.935	1.73	0.887	1.224	1.139	1.545
1.51	0.630	0.733	0.817	0.950	1.74	0.906	1.279	1.163	1.613
1.52	0.639	0.744	0.829	0.965	1.75	0.927	1.344	1.189	1.687
1.53	0.647	0.756	0.840	0.980	1.76	0.951	1.417	1.217	1.774
1.54	0.656	0.769	0.852	0.996	1.77	0.977	1.503	1.249	1.872
1.55	0.666	0.782	0.863	1.013	1.78	1.005	1.601	1.285	1.992
1.56	0.675	0.796	0.876	1.029	1.79	1.038	1.723	1.323	2.131
1.57	0.685	0.810	0.888	1.047	1.80	1.074	1.864	1.368	2.306
1.58	0.695	0.824	0.900	1.065	1.85	1.304	3.151	1.655	3.835
1.59	0.705	0.840	0.913	1.085	1.90	1.608	7.188	2.015	8.603
1.60	0.715	0.856	0.926	1.104	1.91	1.699	9.653	2.132	11.620
1.61	0.726	0.873	0.939	1.126	1.92	1.738	10.709	2.182	12.913

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.048	10	1.023	60	1.758	402	1.887	3017	1.958
3	0.092	12	1.272	70	1.774	502	1.897	4020	1.962
4	0.148	15	1.460	80	1.786	603	1.905	5025	1.963
5	0.235	18	1.543	90	1.797	703	1.913	6031	1.964
6	0.360	20	1.577	100	1.804	804	1.918	7036	1.965
7	0.513	30	1.668	151	1.833	1004	1.928	8041	1.966
8	0.672	40	1.712	201	1.850	1508	1.943	9047	1.967
9	0.854	50	1.739	302	1.872	2011	1.952	10052	1.967


60Hz
50Hz
铁损曲线
Core Loss
23QG085 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23QG085

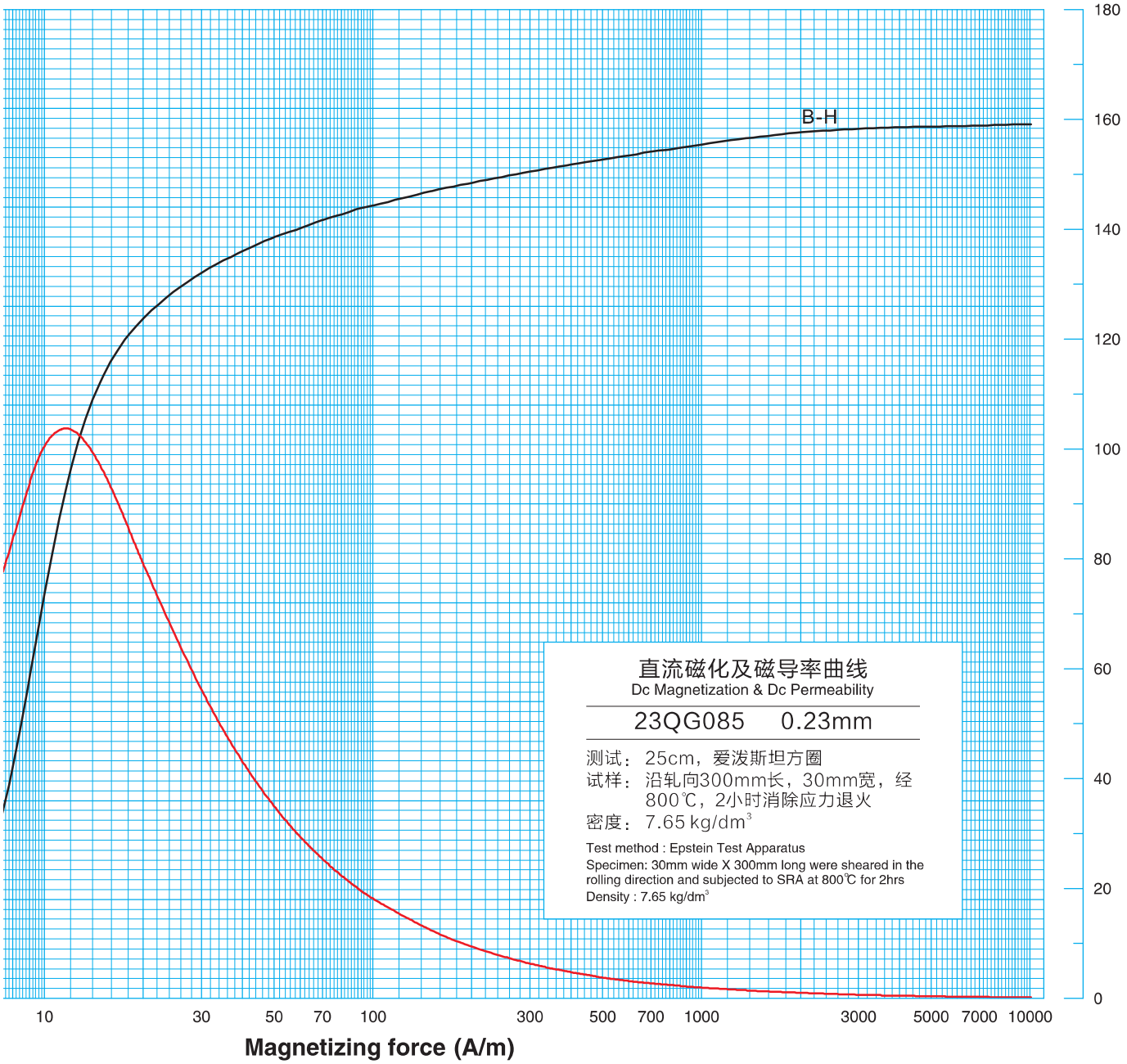


励磁功率曲线
Exciting Power

23QG085 0.23mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

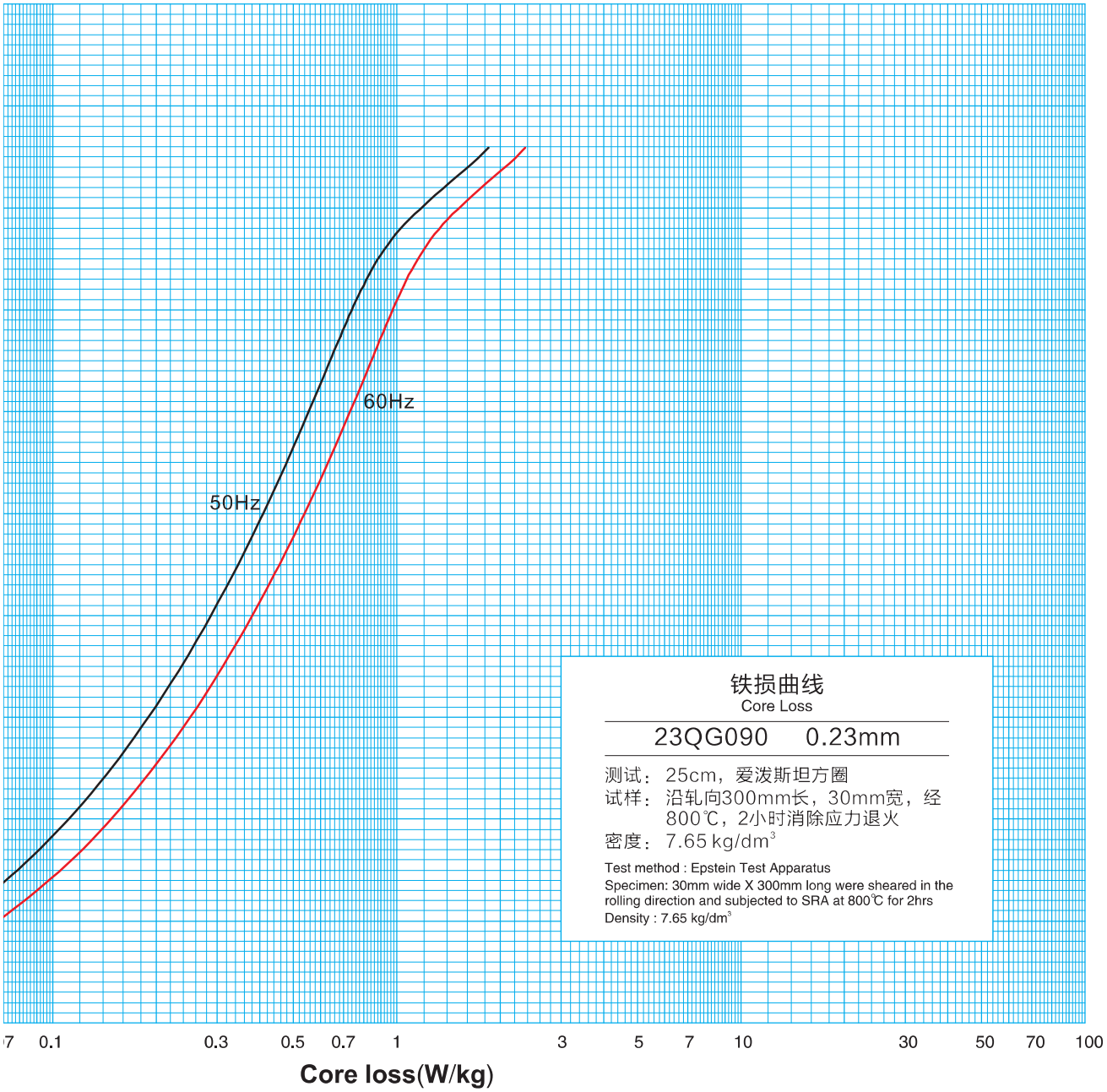

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23QG085 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

23QG085

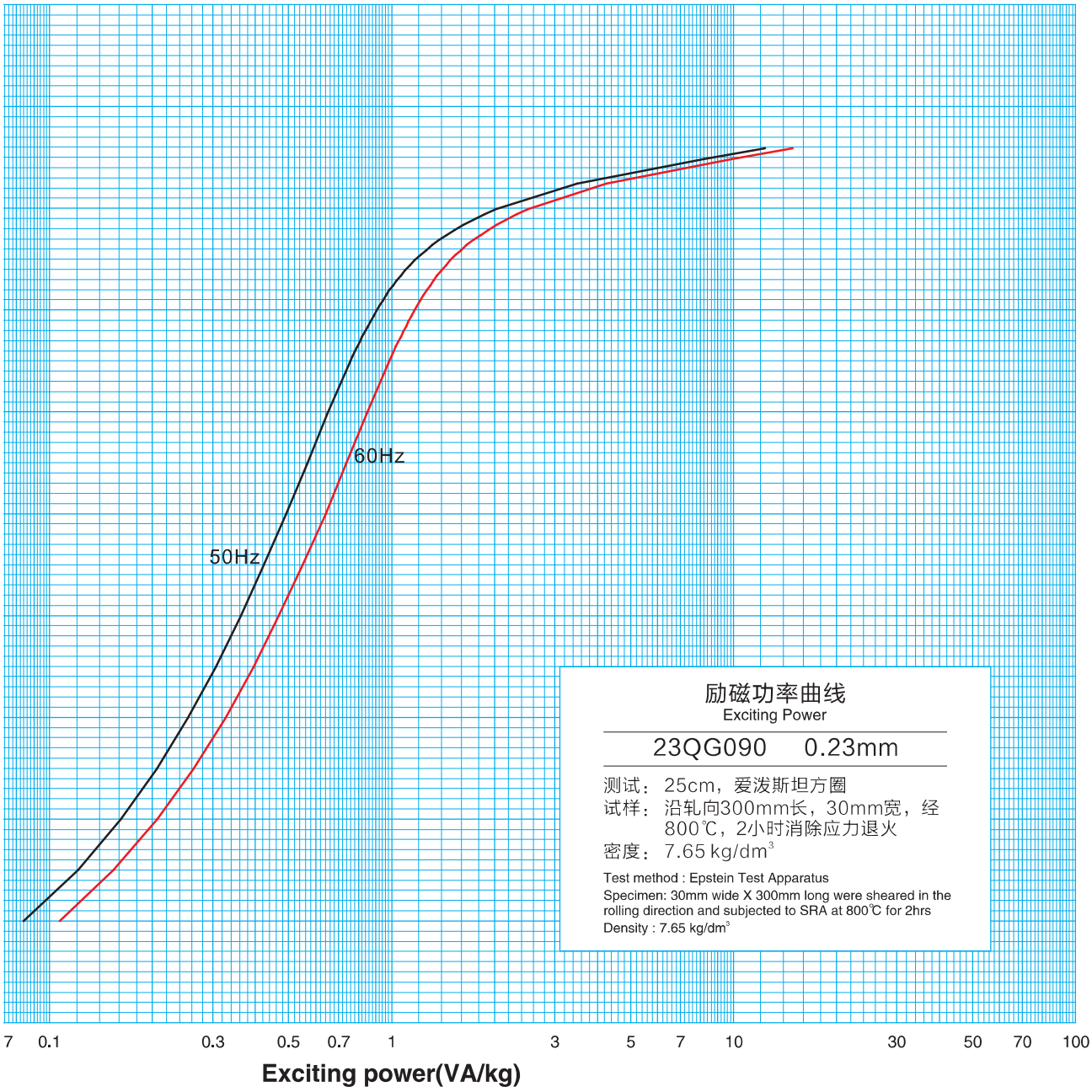
23QG090

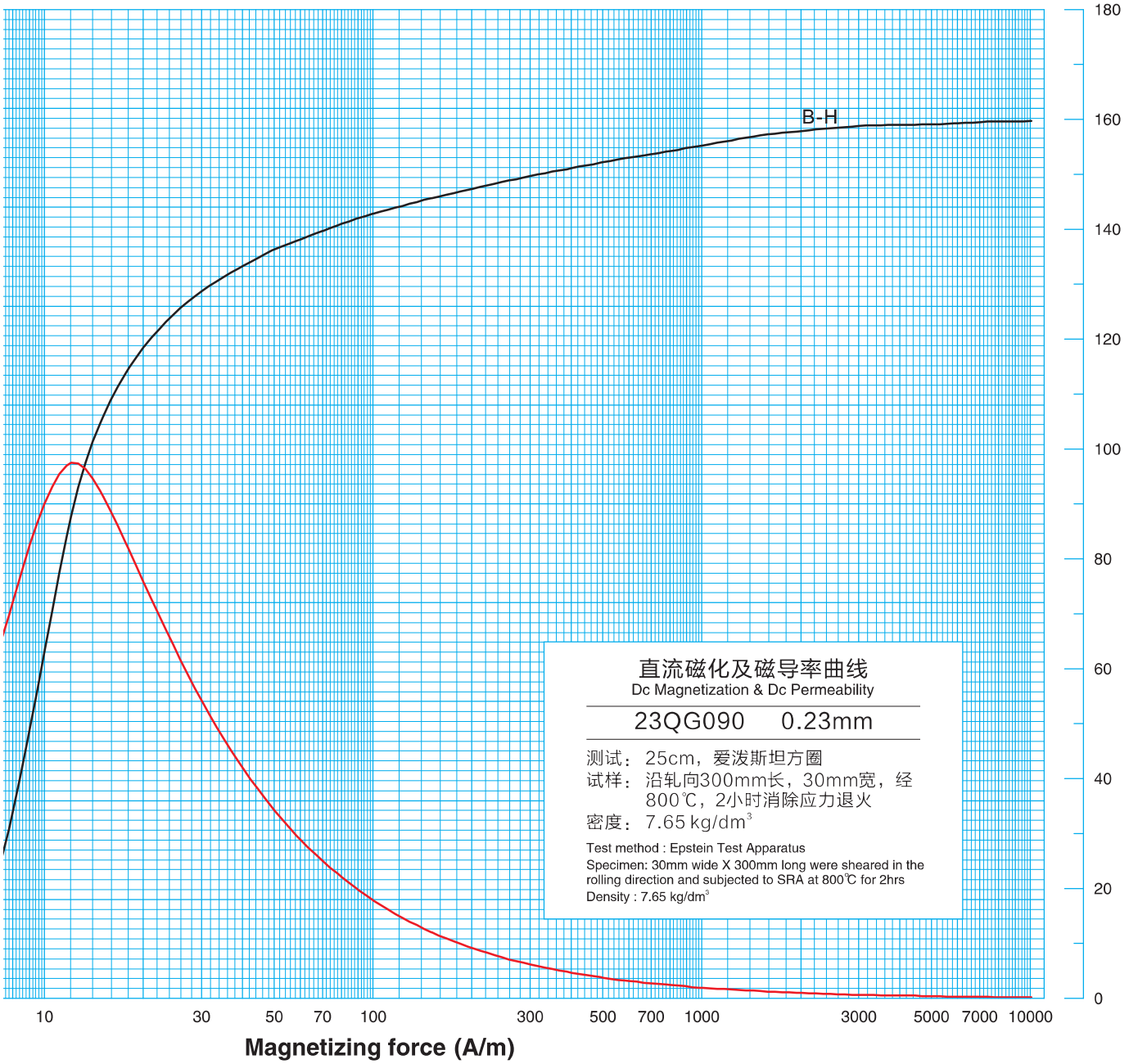
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.052	0.084	0.069	0.107	1.62	0.762	0.942	1.000	1.212
0.50	0.079	0.121	0.105	0.154	1.63	0.774	0.963	1.016	1.237
0.60	0.111	0.162	0.147	0.207	1.64	0.787	0.984	1.032	1.265
0.70	0.148	0.206	0.195	0.264	1.65	0.801	1.009	1.049	1.295
0.80	0.189	0.254	0.250	0.326	1.66	0.814	1.035	1.067	1.326
0.90	0.236	0.306	0.311	0.395	1.67	0.829	1.065	1.084	1.360
1.00	0.288	0.363	0.379	0.468	1.68	0.844	1.097	1.104	1.399
1.10	0.345	0.424	0.455	0.550	1.69	0.861	1.132	1.124	1.442
1.20	0.407	0.492	0.538	0.640	1.70	0.878	1.170	1.146	1.486
1.30	0.477	0.567	0.629	0.737	1.71	0.898	1.213	1.169	1.537
1.40	0.552	0.652	0.729	0.848	1.72	0.918	1.261	1.196	1.595
1.50	0.638	0.756	0.841	0.983	1.73	0.941	1.317	1.223	1.660
1.51	0.647	0.768	0.852	0.997	1.74	0.965	1.379	1.254	1.736
1.52	0.656	0.781	0.865	1.013	1.75	0.992	1.448	1.288	1.823
1.53	0.665	0.794	0.877	1.029	1.76	1.022	1.530	1.325	1.919
1.54	0.676	0.807	0.889	1.046	1.77	1.054	1.624	1.364	2.030
1.55	0.686	0.821	0.903	1.064	1.78	1.089	1.736	1.407	2.160
1.56	0.695	0.836	0.916	1.082	1.79	1.125	1.869	1.453	2.317
1.57	0.706	0.851	0.929	1.101	1.80	1.166	2.021	1.504	2.503
1.58	0.717	0.868	0.943	1.121	1.85	1.414	3.489	1.816	4.251
1.59	0.727	0.885	0.957	1.141	1.90	1.720	8.203	2.205	9.889
1.60	0.738	0.903	0.970	1.163	1.91	1.810	11.109	2.316	13.400
1.61	0.750	0.922	0.986	1.187	1.92	1.848	12.354	2.363	14.904

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.036	10	0.906	60	1.736	402	1.879	3017	1.964
3	0.075	12	1.176	70	1.753	502	1.891	4020	1.967
4	0.124	15	1.377	80	1.767	603	1.900	5025	1.968
5	0.193	18	1.476	90	1.778	703	1.907	6031	1.970
6	0.297	20	1.518	100	1.787	803	1.914	7036	1.972
7	0.431	30	1.631	151	1.819	1004	1.925	8042	1.973
8	0.582	40	1.682	201	1.838	1508	1.945	9047	1.973
9	0.748	50	1.715	302	1.863	2011	1.954	10053	1.974


60Hz
50Hz
铁损曲线
Core Loss
23QG090 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23QG090


60Hz
50Hz
励磁功率曲线
Exciting Power
23QG090 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

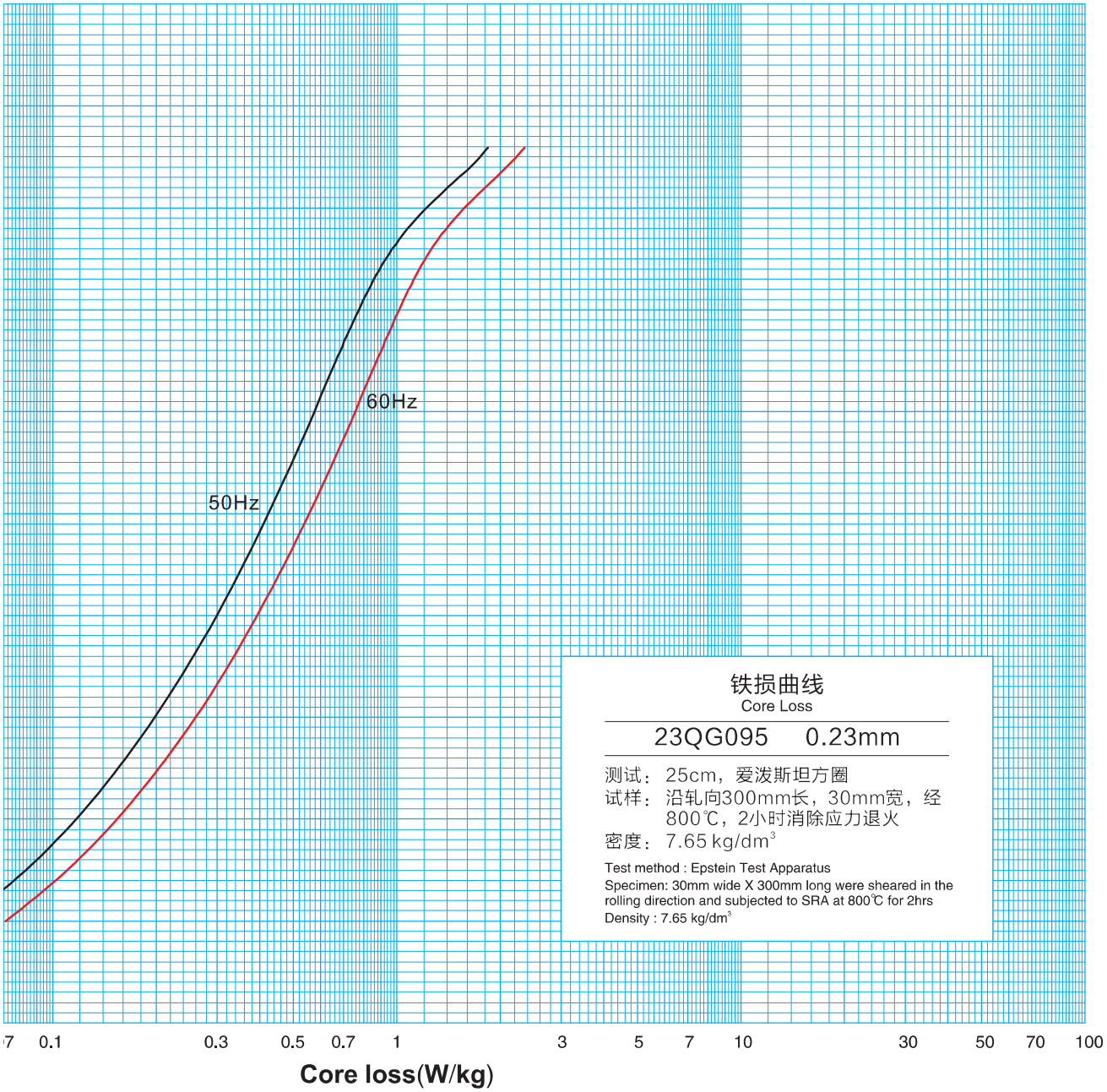

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23QG090 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

23QG090

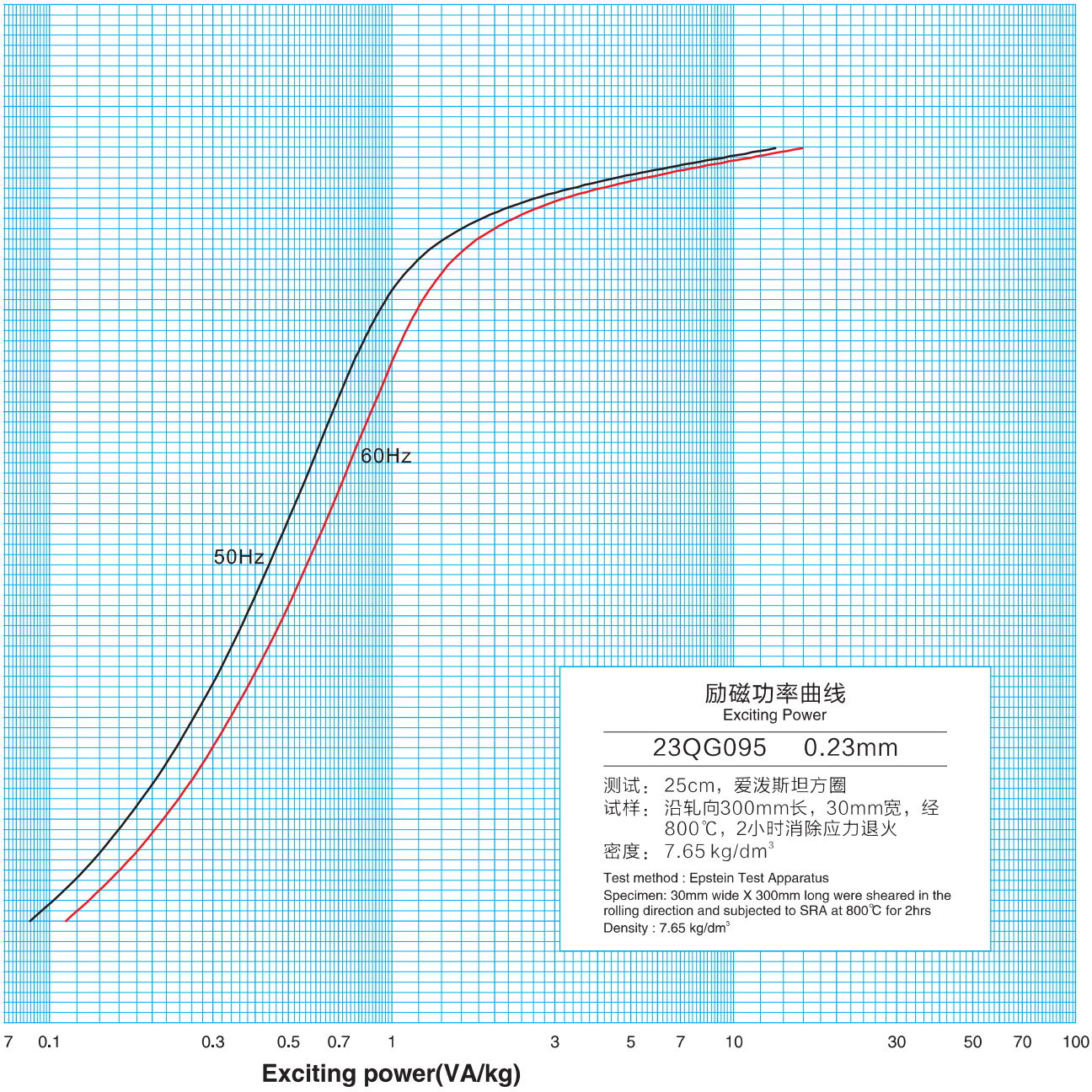
23QG095

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.055	0.088	0.073	0.112	1.62	0.798	0.959	1.045	1.231
0.50	0.083	0.126	0.110	0.160	1.63	0.812	0.981	1.062	1.257
0.60	0.117	0.168	0.153	0.215	1.64	0.825	1.003	1.079	1.285
0.70	0.155	0.214	0.203	0.274	1.65	0.840	1.027	1.098	1.316
0.80	0.197	0.264	0.259	0.338	1.66	0.855	1.055	1.118	1.349
0.90	0.245	0.318	0.322	0.408	1.67	0.871	1.082	1.137	1.383
1.00	0.299	0.375	0.392	0.483	1.68	0.888	1.115	1.159	1.421
1.10	0.358	0.438	0.470	0.565	1.69	0.906	1.153	1.180	1.463
1.20	0.423	0.508	0.555	0.656	1.70	0.925	1.192	1.205	1.511
1.30	0.494	0.584	0.650	0.755	1.71	0.945	1.239	1.230	1.565
1.40	0.574	0.670	0.755	0.868	1.72	0.967	1.289	1.257	1.625
1.50	0.664	0.775	0.872	1.003	1.73	0.991	1.345	1.285	1.695
1.51	0.673	0.787	0.885	1.017	1.74	1.015	1.415	1.317	1.772
1.52	0.684	0.800	0.898	1.033	1.75	1.043	1.491	1.350	1.864
1.53	0.694	0.813	0.912	1.050	1.76	1.072	1.579	1.387	1.972
1.54	0.704	0.827	0.925	1.066	1.77	1.104	1.681	1.426	2.086
1.55	0.715	0.840	0.939	1.084	1.78	1.136	1.807	1.468	2.237
1.56	0.726	0.854	0.953	1.100	1.79	1.173	1.946	1.513	2.409
1.57	0.737	0.869	0.967	1.121	1.80	1.212	2.119	1.561	2.609
1.58	0.749	0.886	0.982	1.140	1.85	1.444	3.770	1.856	4.576
1.59	0.760	0.902	0.997	1.161	1.90	1.730	8.845	2.207	10.635
1.60	0.772	0.920	1.013	1.184	1.91	1.808	11.921	2.309	14.304
1.61	0.785	0.938	1.029	1.208	1.92	1.841	13.239	2.353	15.876

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.036	10	0.906	60	1.735	402	1.878	3017	1.963
3	0.075	12	1.175	70	1.752	502	1.890	4020	1.966
4	0.124	15	1.376	80	1.766	603	1.899	5025	1.967
5	0.193	18	1.476	90	1.777	703	1.906	6031	1.969
6	0.297	20	1.518	100	1.786	803	1.913	7036	1.971
7	0.431	30	1.630	151	1.818	1004	1.924	8042	1.972
8	0.582	40	1.681	201	1.837	1508	1.944	9047	1.972
9	0.748	50	1.714	302	1.862	2011	1.953	10053	1.973


60Hz
50Hz
铁损曲线
Core Loss
23QG095 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23QG095

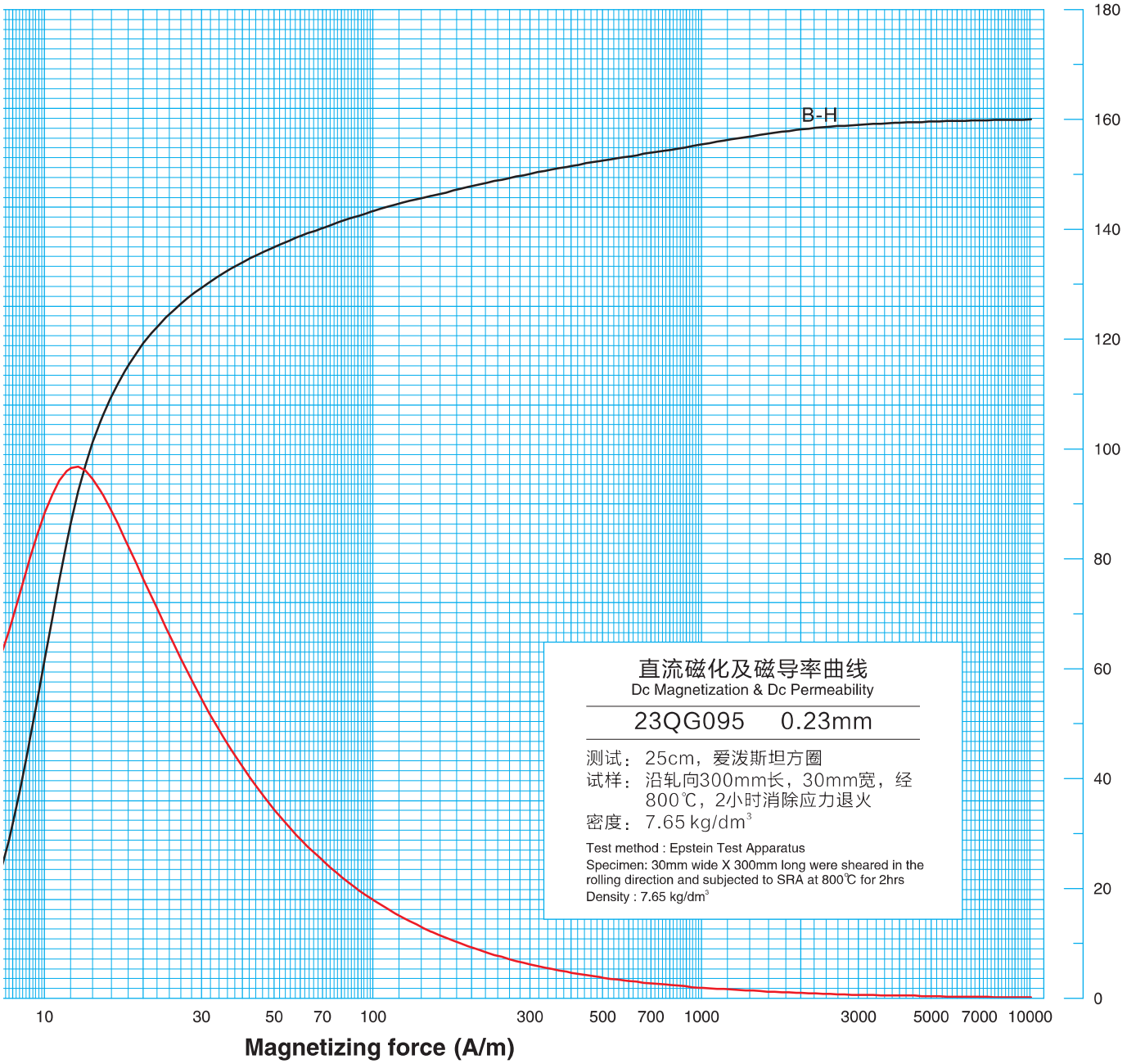


励磁功率曲线
Exciting Power

23QG095 0.23mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

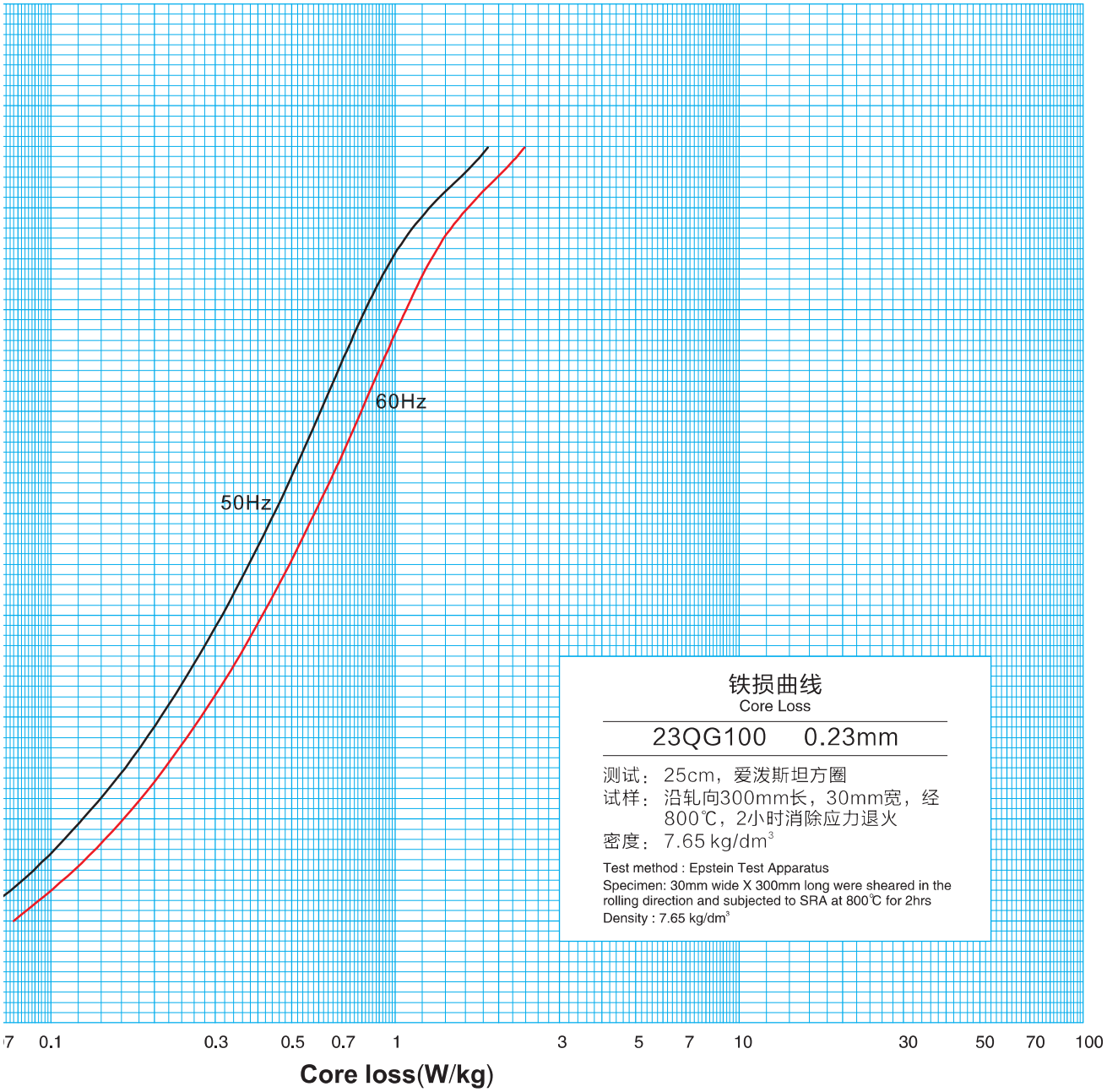

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23QG095 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

23QG095

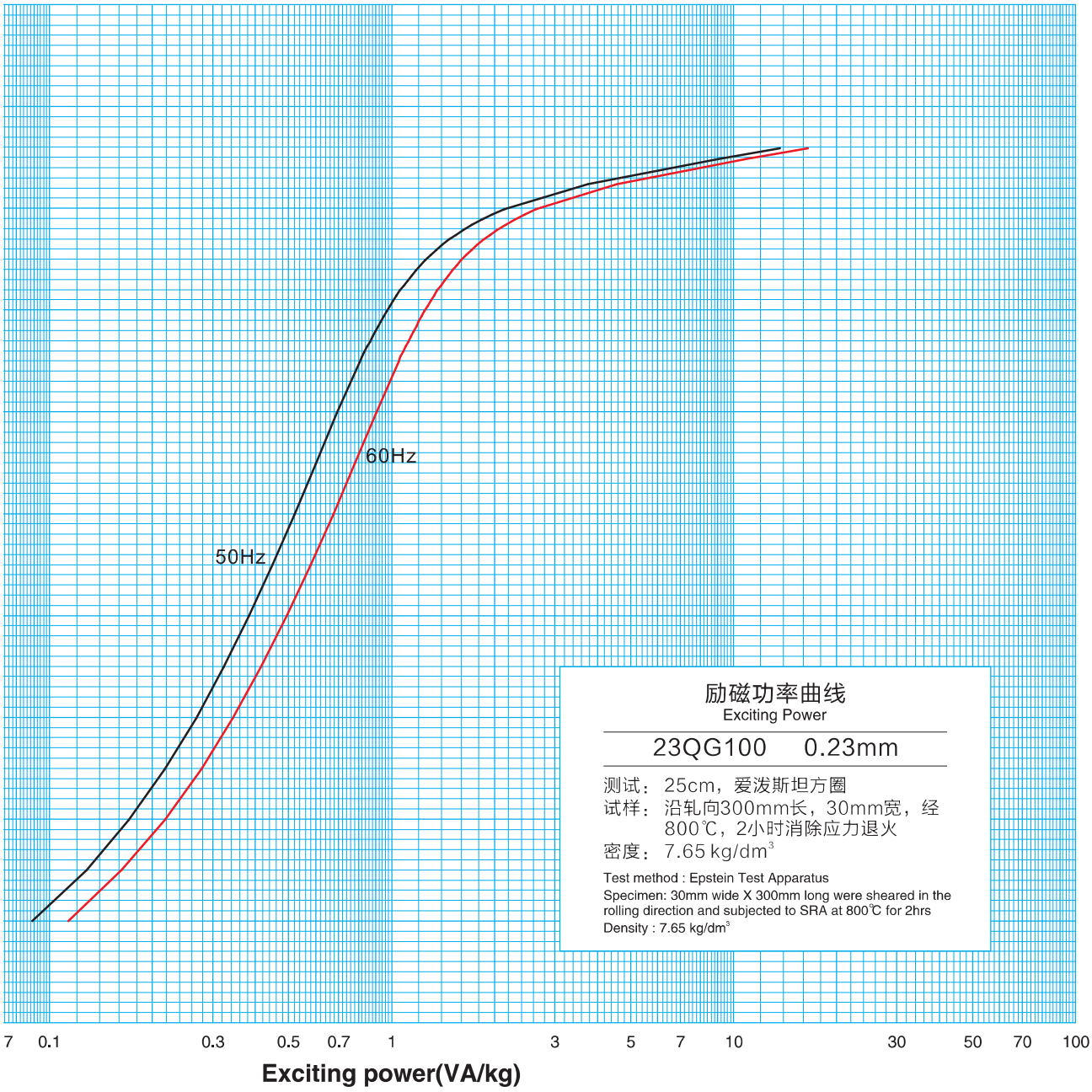
23QG100

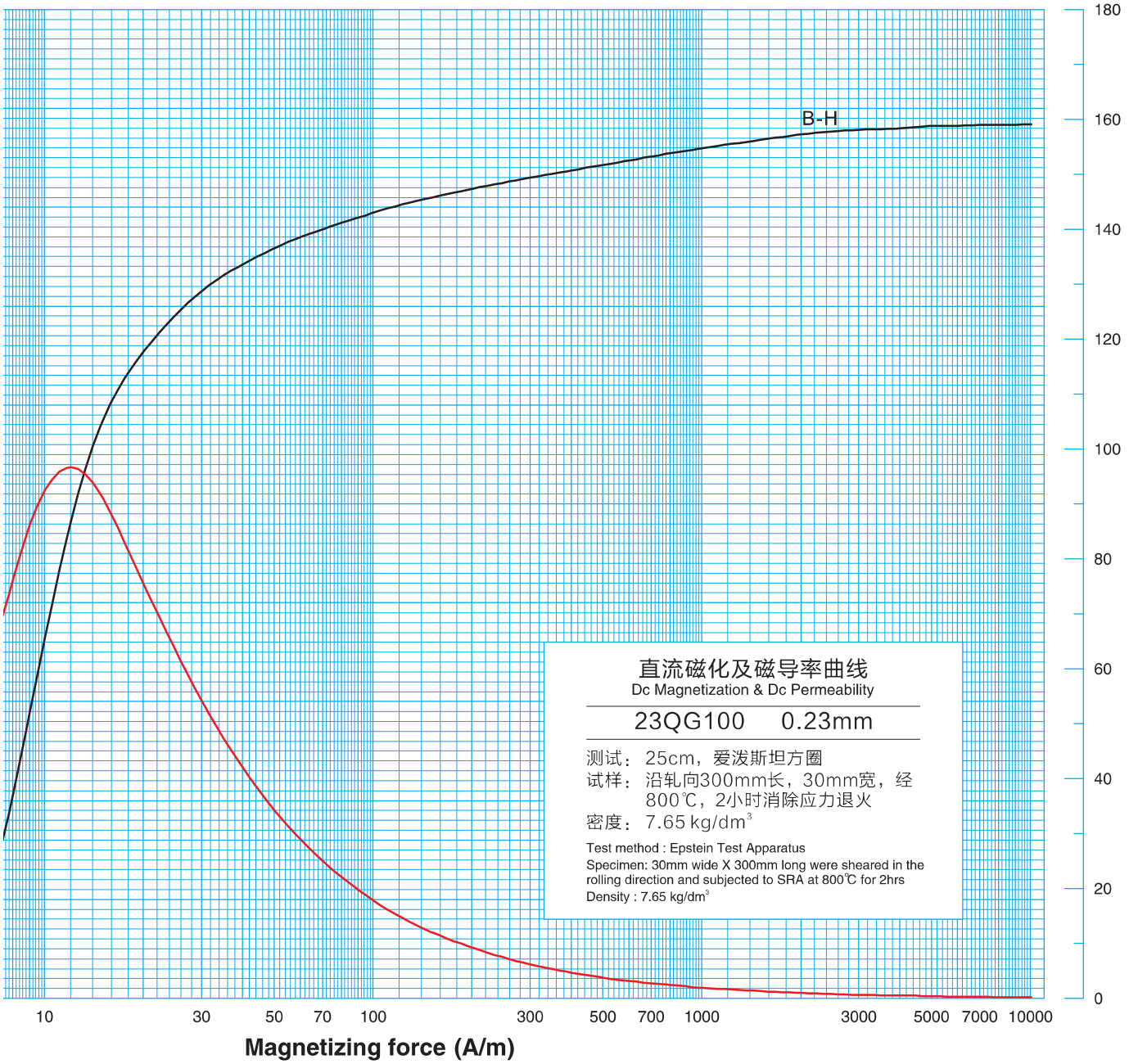
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.059	0.089	0.078	0.113	1.62	0.845	1.011	1.106	1.302
0.50	0.089	0.128	0.116	0.162	1.63	0.859	1.033	1.125	1.331
0.60	0.124	0.171	0.162	0.217	1.64	0.874	1.059	1.142	1.359
0.70	0.164	0.217	0.214	0.278	1.65	0.889	1.086	1.162	1.393
0.80	0.208	0.268	0.272	0.344	1.66	0.905	1.114	1.182	1.428
0.90	0.258	0.323	0.338	0.416	1.67	0.921	1.146	1.202	1.466
1.00	0.314	0.383	0.411	0.494	1.68	0.938	1.177	1.224	1.506
1.10	0.376	0.448	0.492	0.580	1.69	0.956	1.216	1.246	1.551
1.20	0.444	0.521	0.582	0.677	1.70	0.975	1.253	1.272	1.598
1.30	0.520	0.600	0.683	0.781	1.71	0.995	1.300	1.296	1.650
1.40	0.605	0.694	0.795	0.902	1.72	1.016	1.351	1.322	1.715
1.50	0.702	0.808	0.921	1.048	1.73	1.040	1.406	1.351	1.778
1.51	0.712	0.820	0.935	1.063	1.74	1.063	1.467	1.380	1.856
1.52	0.723	0.834	0.949	1.081	1.75	1.090	1.539	1.413	1.941
1.53	0.734	0.849	0.963	1.100	1.76	1.118	1.624	1.449	2.034
1.54	0.745	0.865	0.978	1.120	1.77	1.149	1.719	1.487	2.156
1.55	0.756	0.879	0.992	1.139	1.78	1.180	1.835	1.527	2.291
1.56	0.768	0.897	1.008	1.159	1.79	1.217	1.969	1.570	2.453
1.57	0.780	0.913	1.023	1.181	1.80	1.254	2.136	1.618	2.639
1.58	0.793	0.932	1.039	1.203	1.85	1.482	3.751	1.900	4.564
1.59	0.805	0.950	1.055	1.225	1.90	1.751	9.020	2.244	10.872
1.60	0.818	0.969	1.072	1.250	1.91	1.826	12.270	2.341	14.835
1.61	0.831	0.990	1.089	1.276	1.92	1.858	13.663	2.382	16.534

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	10	0.929	60	1.740	402	1.875	3017	1.957
3	0.073	12	1.166	70	1.756	502	1.886	4020	1.960
4	0.122	15	1.371	80	1.769	603	1.895	5025	1.964
5	0.198	18	1.468	90	1.779	703	1.903	6030	1.964
6	0.313	20	1.510	100	1.789	804	1.909	7036	1.966
7	0.455	30	1.631	151	1.819	1005	1.919	8042	1.966
8	0.614	40	1.685	201	1.838	1508	1.936	9049	1.967
9	0.781	50	1.717	302	1.860	2011	1.947	10054	1.968


60Hz
50Hz
铁损曲线
Core Loss
23QG100 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23QG100


60Hz
50Hz
励磁功率曲线
Exciting Power
23QG100 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

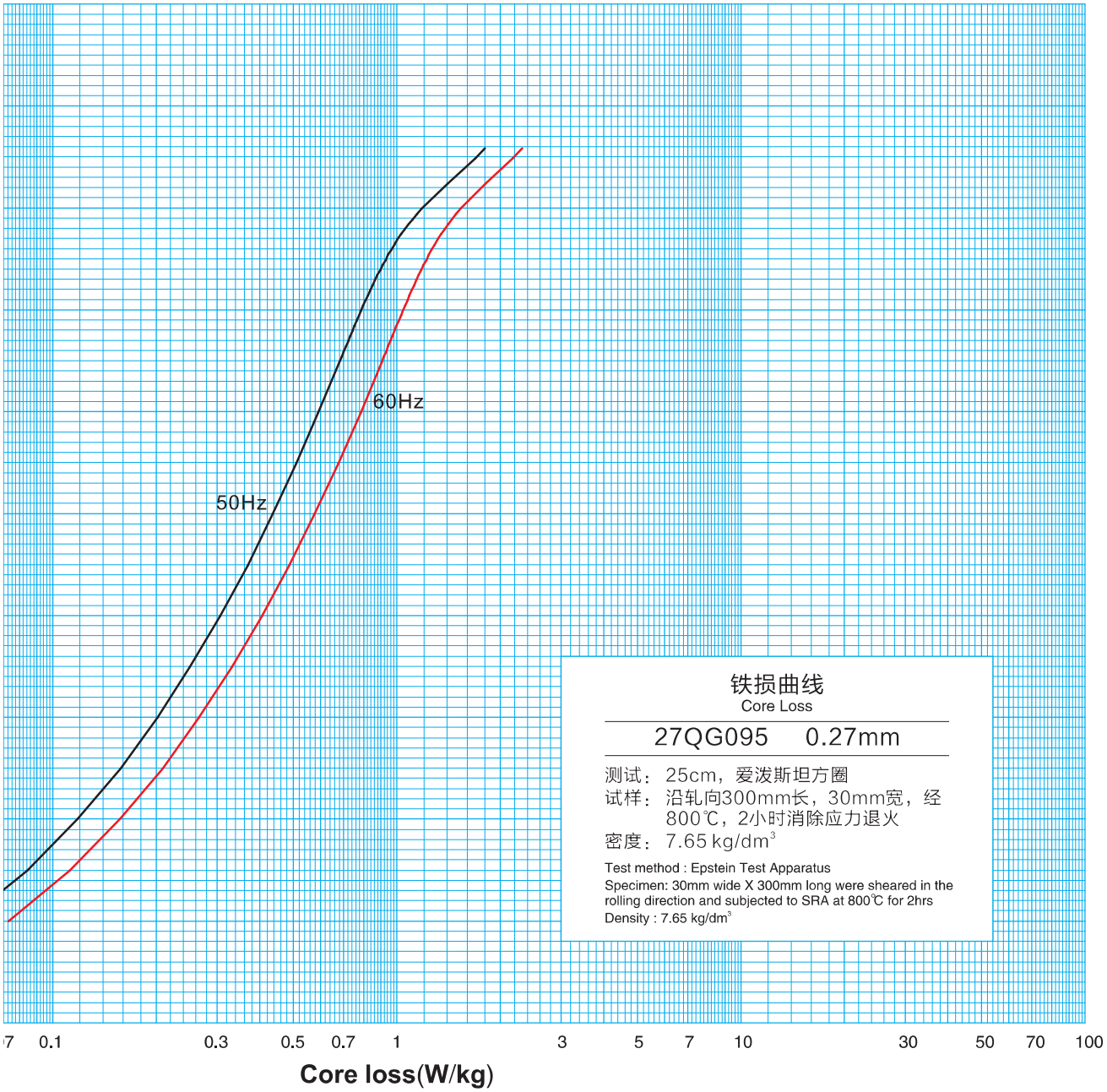

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23QG100 0.23mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

23QG100

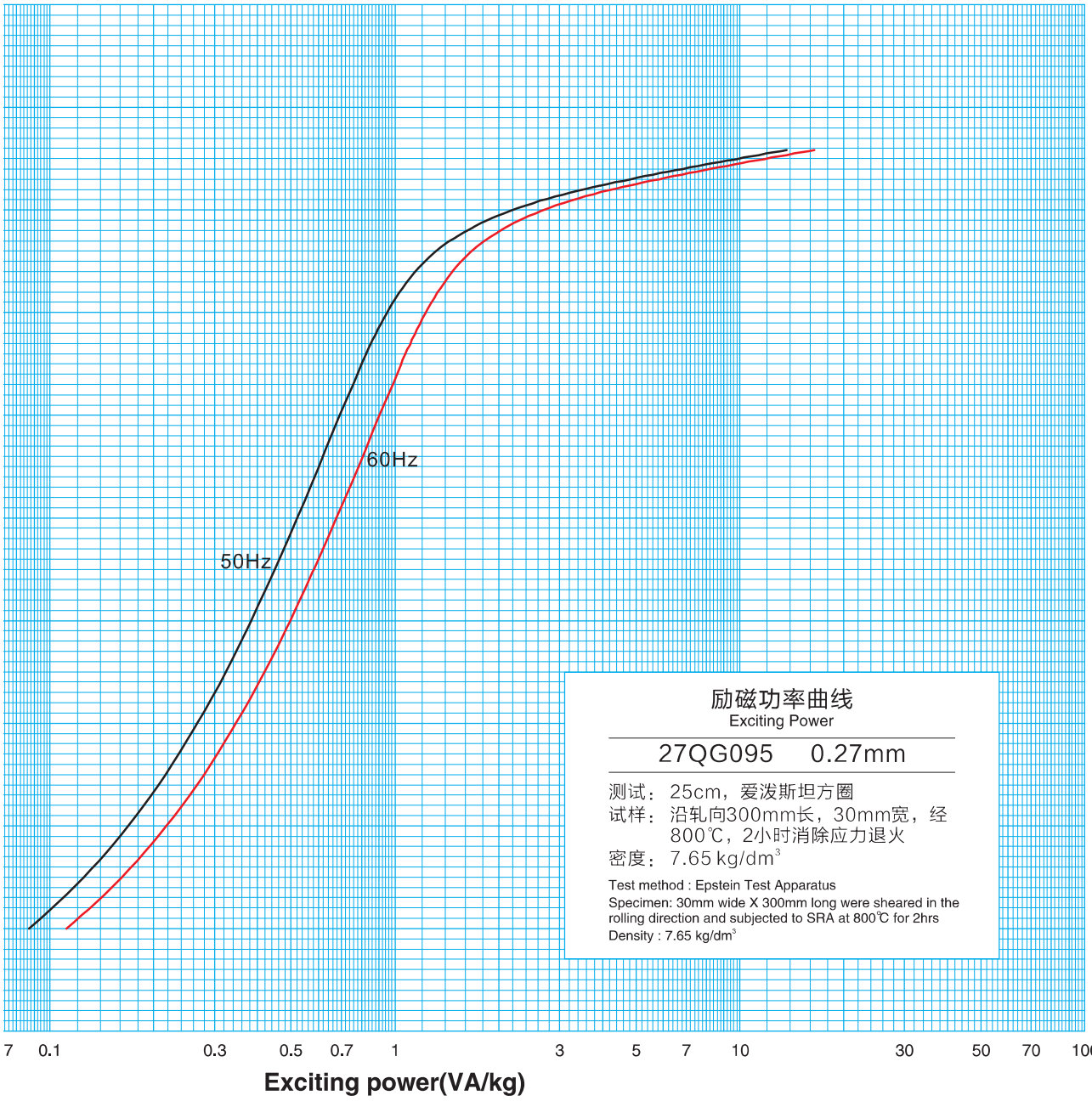
27QG095

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.055	0.087	0.074	0.112	1.62	0.811	0.984	1.072	1.273
0.50	0.084	0.126	0.112	0.162	1.63	0.823	1.005	1.088	1.300
0.60	0.118	0.168	0.157	0.217	1.64	0.836	1.028	1.104	1.327
0.70	0.157	0.215	0.208	0.279	1.65	0.850	1.052	1.121	1.356
0.80	0.202	0.267	0.266	0.345	1.66	0.863	1.077	1.139	1.388
0.90	0.251	0.323	0.332	0.419	1.67	0.878	1.106	1.158	1.422
1.00	0.306	0.383	0.406	0.497	1.68	0.893	1.139	1.176	1.459
1.10	0.368	0.449	0.487	0.583	1.69	0.909	1.175	1.196	1.502
1.20	0.436	0.520	0.577	0.677	1.70	0.926	1.215	1.217	1.550
1.30	0.509	0.600	0.676	0.782	1.71	0.944	1.259	1.239	1.600
1.40	0.591	0.690	0.785	0.900	1.72	0.963	1.306	1.263	1.660
1.50	0.682	0.799	0.904	1.040	1.73	0.984	1.364	1.288	1.727
1.51	0.692	0.810	0.917	1.054	1.74	1.005	1.428	1.315	1.802
1.52	0.701	0.823	0.931	1.071	1.75	1.029	1.504	1.344	1.888
1.53	0.711	0.836	0.944	1.087	1.76	1.054	1.594	1.375	1.994
1.54	0.722	0.850	0.957	1.106	1.77	1.083	1.696	1.410	2.113
1.55	0.732	0.864	0.970	1.122	1.78	1.113	1.820	1.447	2.260
1.56	0.743	0.879	0.984	1.143	1.79	1.146	1.974	1.486	2.442
1.57	0.753	0.894	0.998	1.161	1.80	1.181	2.158	1.532	2.651
1.58	0.764	0.910	1.012	1.181	1.85	1.405	3.948	1.807	4.780
1.59	0.776	0.927	1.027	1.203	1.90	1.690	9.309	2.169	11.204
1.60	0.787	0.945	1.041	1.225	1.91	1.768	12.345	2.269	2.269
1.61	0.799	0.964	1.057	1.249	1.92	1.802	13.646	2.312	16.438

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	10	0.949	60	1.749	402	1.887	3018	1.975
3	0.073	12	1.207	70	1.764	502	1.897	4022	1.978
4	0.151	15	1.398	80	1.777	603	1.908	5027	1.980
5	0.223	18	1.495	90	1.787	703	1.915	6033	1.980
6	0.329	20	1.536	100	1.796	804	1.923	7038	1.982
7	0.461	30	1.645	151	1.829	1005	1.933	8044	1.982
8	0.619	40	1.695	201	1.848	1509	1.953	9050	1.983
9	0.787	50	1.725	302	1.870	2012	1.964	10051	1.984


60Hz
50Hz
铁损曲线
Core Loss
27QG095 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27QG095

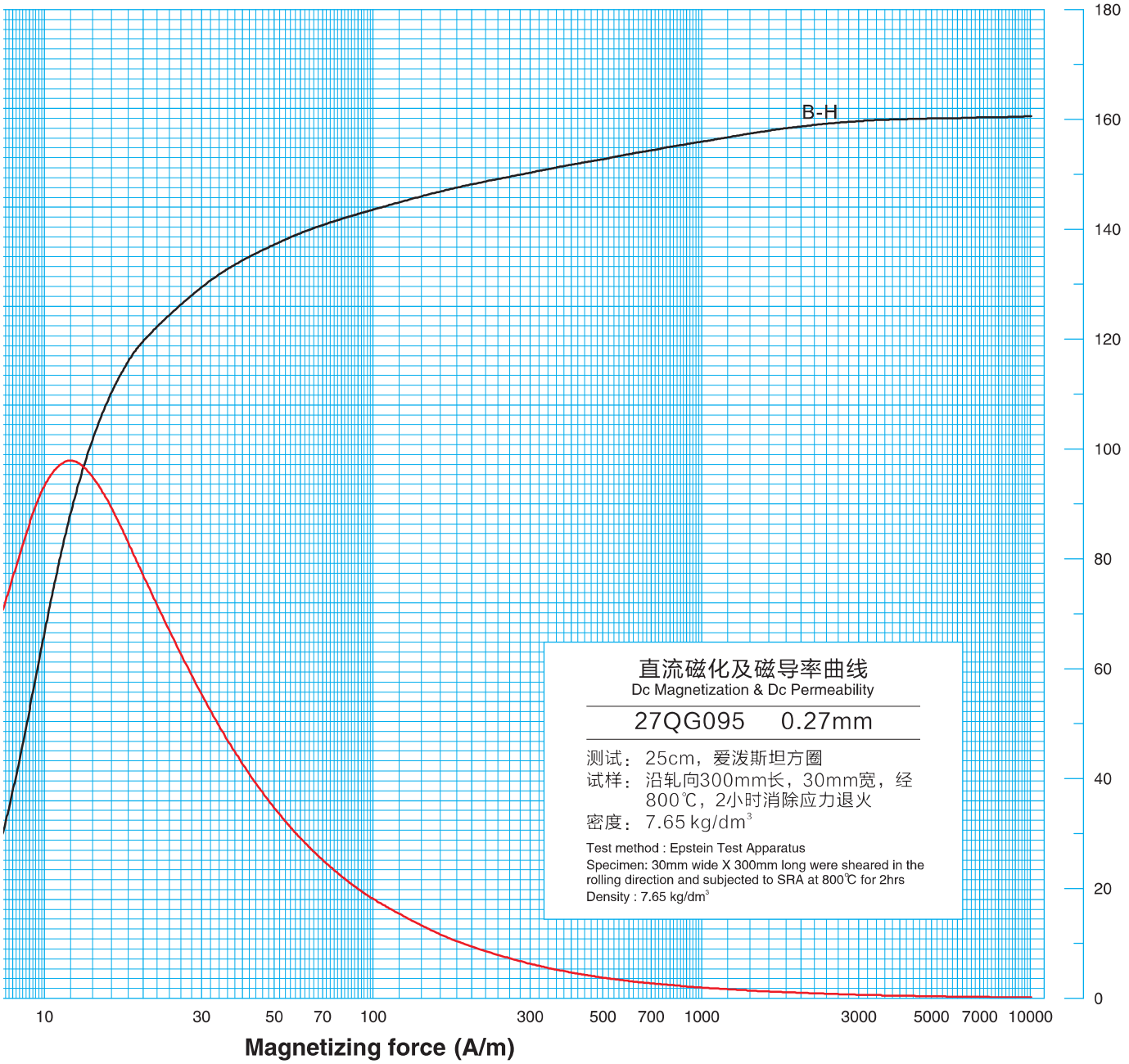


励磁功率曲线
Exciting Power

27QG095 0.27mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

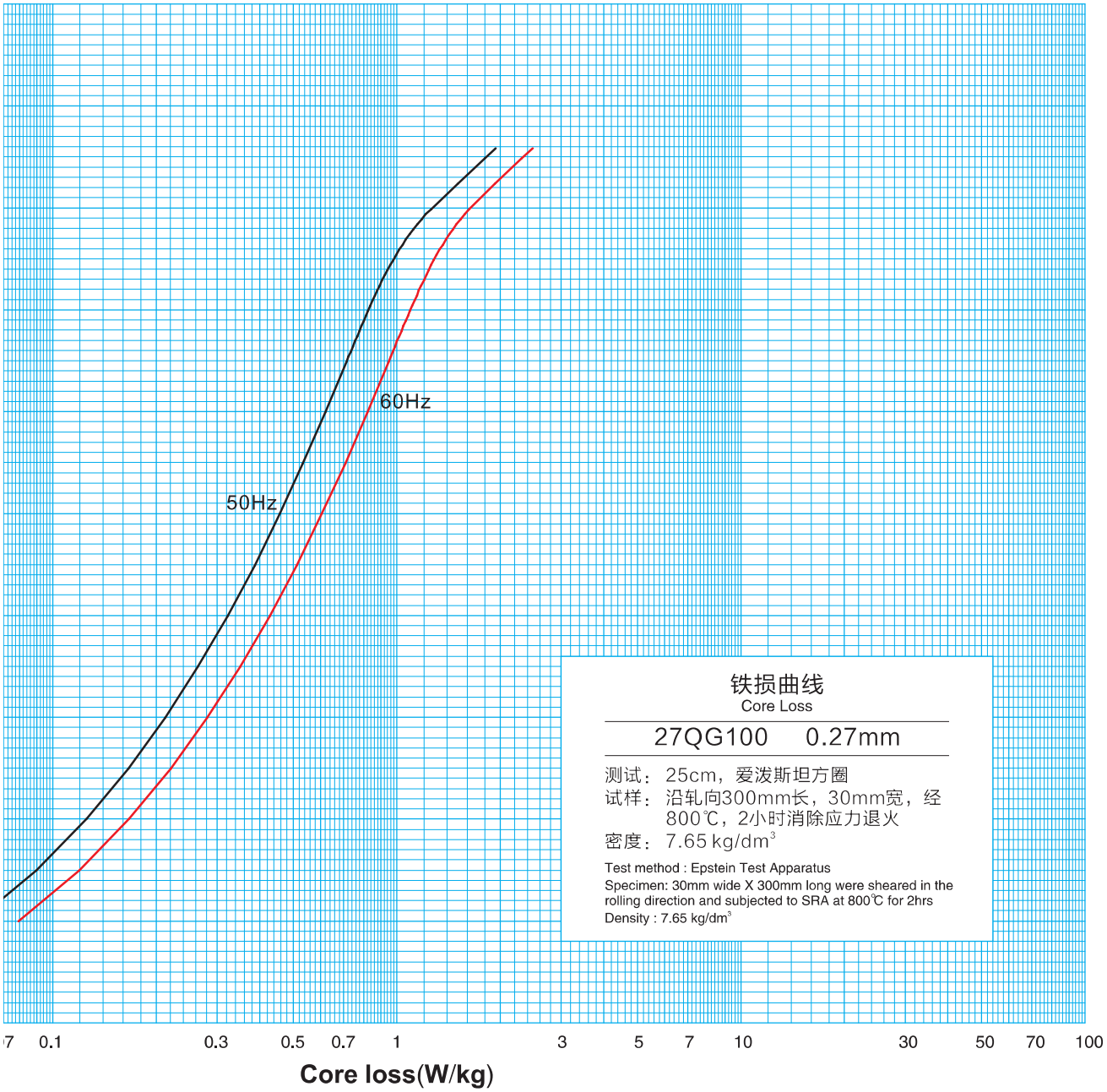

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27QG095 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

27QG095

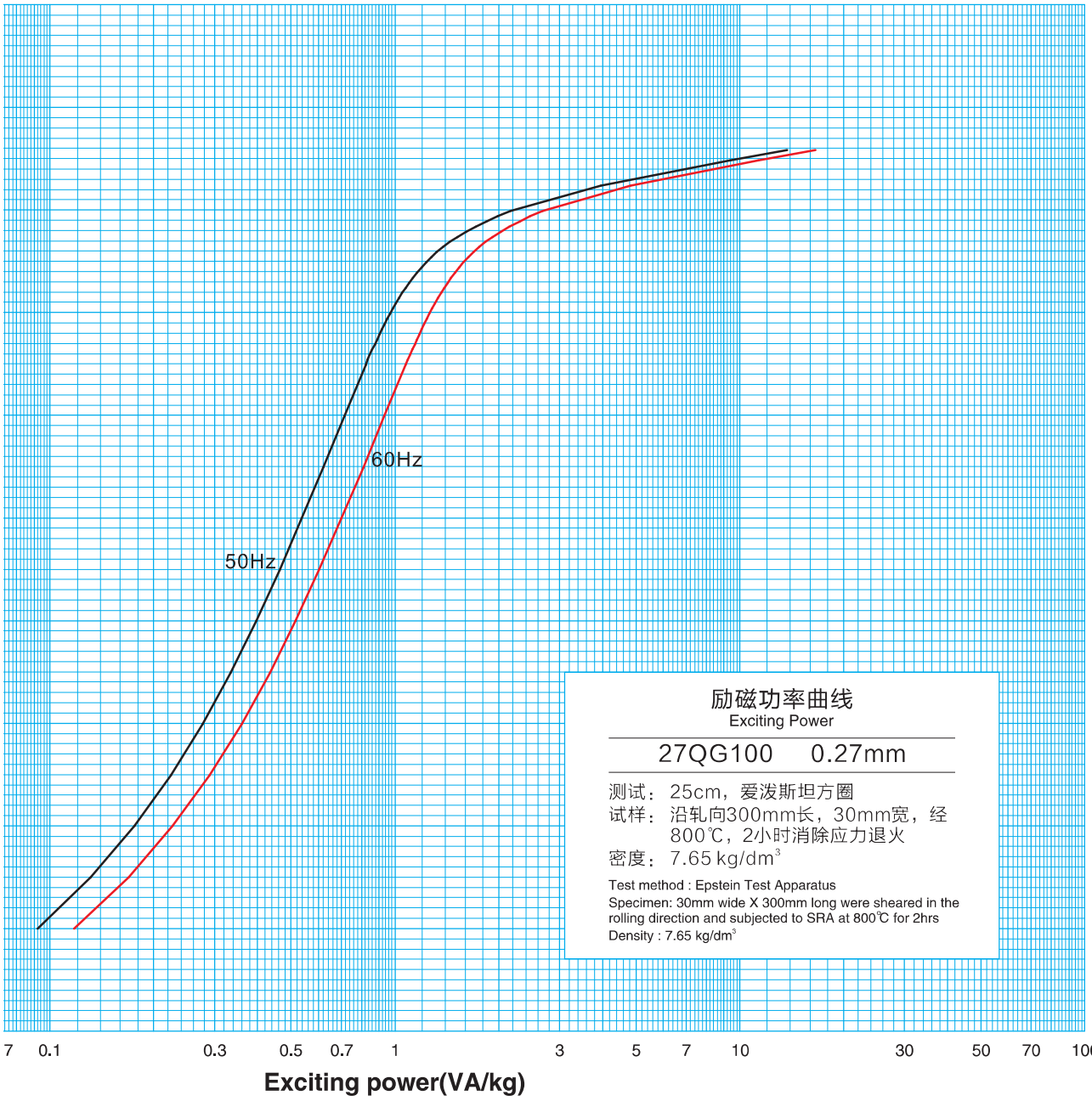
27QG100

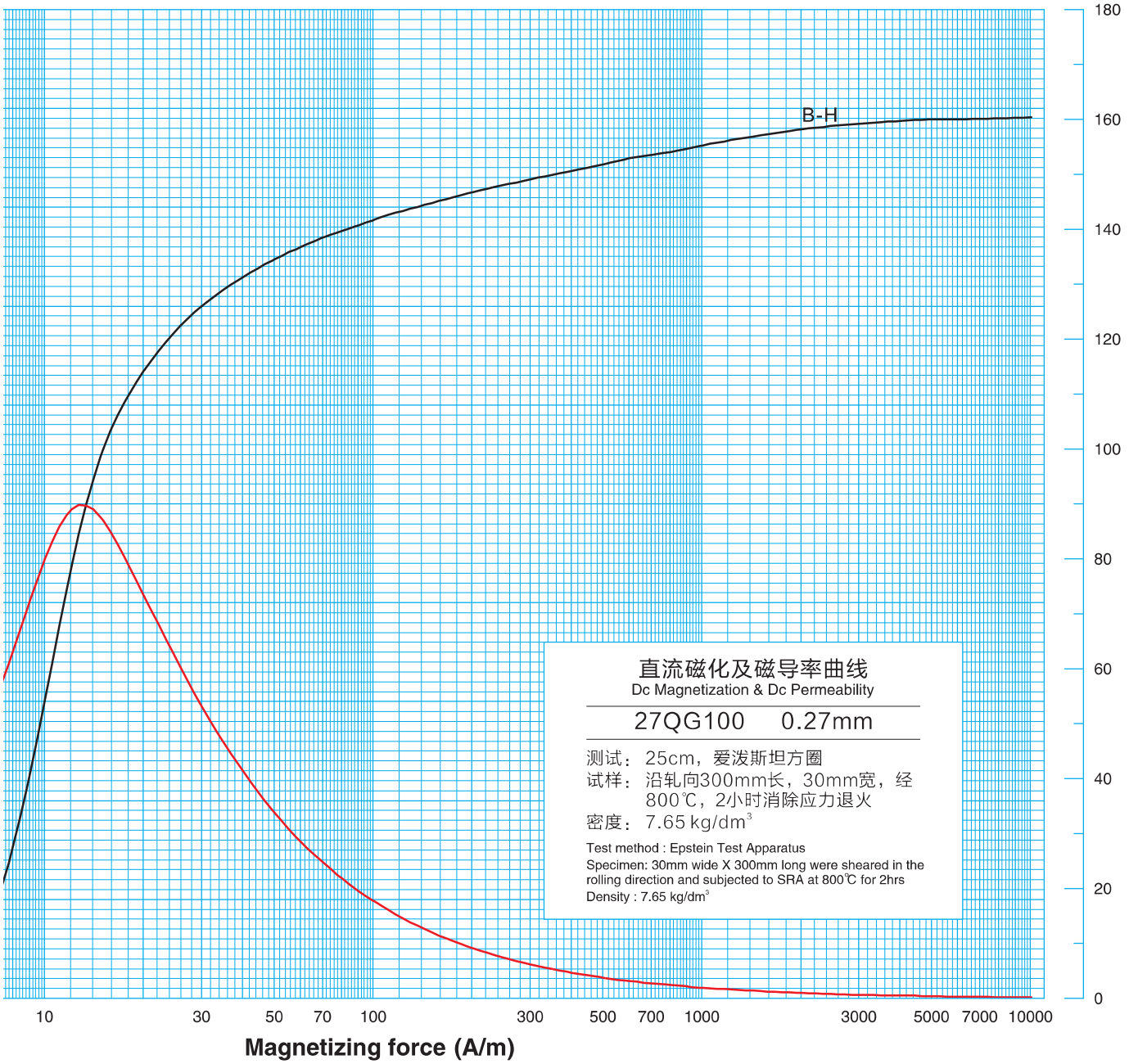
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.059	0.092	0.080	0.118	1.62	0.851	1.007	1.125	1.308
0.50	0.090	0.131	0.120	0.169	1.63	0.865	1.029	1.145	1.334
0.60	0.125	0.176	0.167	0.227	1.64	0.878	1.050	1.160	1.361
0.70	0.166	0.224	0.220	0.290	1.65	0.892	1.075	1.178	1.390
0.80	0.212	0.277	0.281	0.360	1.66	0.907	1.099	1.198	1.422
0.90	0.264	0.334	0.350	0.434	1.67	0.923	1.128	1.217	1.456
1.00	0.322	0.396	0.427	0.514	1.68	0.939	1.159	1.237	1.493
1.10	0.386	0.464	0.512	0.603	1.69	0.957	1.194	1.257	1.534
1.20	0.457	0.538	0.606	0.701	1.70	0.975	1.231	1.278	1.579
1.30	0.534	0.620	0.709	0.809	1.71	0.995	1.275	1.306	1.631
1.40	0.619	0.714	0.822	0.932	1.72	1.016	1.324	1.332	1.689
1.50	0.714	0.822	0.947	1.074	1.73	1.039	1.379	1.359	1.755
1.51	0.724	0.833	0.960	1.089	1.74	1.063	1.445	1.389	1.831
1.52	0.735	0.847	0.974	1.106	1.75	1.089	1.521	1.420	1.921
1.53	0.745	0.860	0.988	1.122	1.76	1.117	1.610	1.454	2.023
1.54	0.756	0.874	1.001	1.141	1.77	1.148	1.714	1.492	2.146
1.55	0.767	0.888	1.016	1.158	1.78	1.180	1.839	1.532	2.297
1.56	0.778	0.903	1.032	1.177	1.79	1.216	1.987	1.573	2.465
1.57	0.790	0.918	1.046	1.196	1.80	1.256	2.167	1.623	2.684
1.58	0.801	0.934	1.062	1.216	1.85	1.501	3.956	1.930	4.819
1.59	0.813	0.951	1.077	1.237	1.90	1.800	9.362	2.303	11.325
1.60	0.825	0.969	1.093	1.259	1.91	1.893	12.413	2.431	14.978
1.61	0.838	0.988	1.109	1.283	1.92	1.933	13.720	2.486	16.544

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	10	0.804	60	1.719	402	1.874	3018	1.968
3	0.073	12	1.074	70	1.738	502	1.887	4022	1.974
4	0.126	15	1.311	80	1.752	603	1.899	5028	1.977
5	0.192	18	1.423	90	1.763	703	1.906	6034	1.978
6	0.278	20	1.471	101	1.774	804	1.912	7040	1.979
7	0.381	30	1.601	151	1.809	1005	1.925	8045	1.980
8	0.509	40	1.659	201	1.831	1509	1.945	9053	1.981
9	0.655	50	1.695	302	1.857	2012	1.957	10049	1.982


60Hz
50Hz
铁损曲线
Core Loss
27QG100 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27QG100


60Hz
50Hz
励磁功率曲线
Exciting Power
27QG100 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

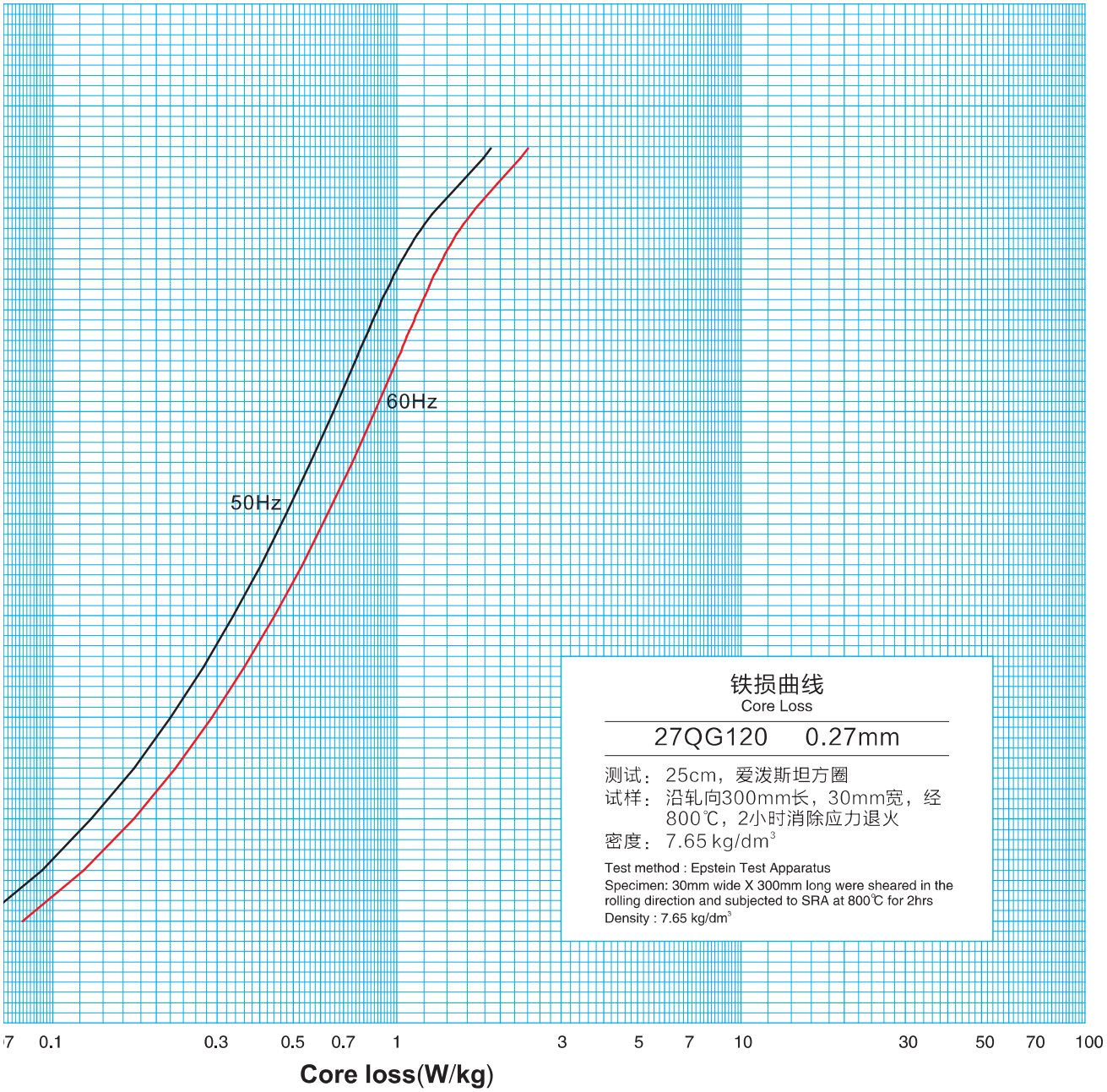

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27QG100 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

27QG100

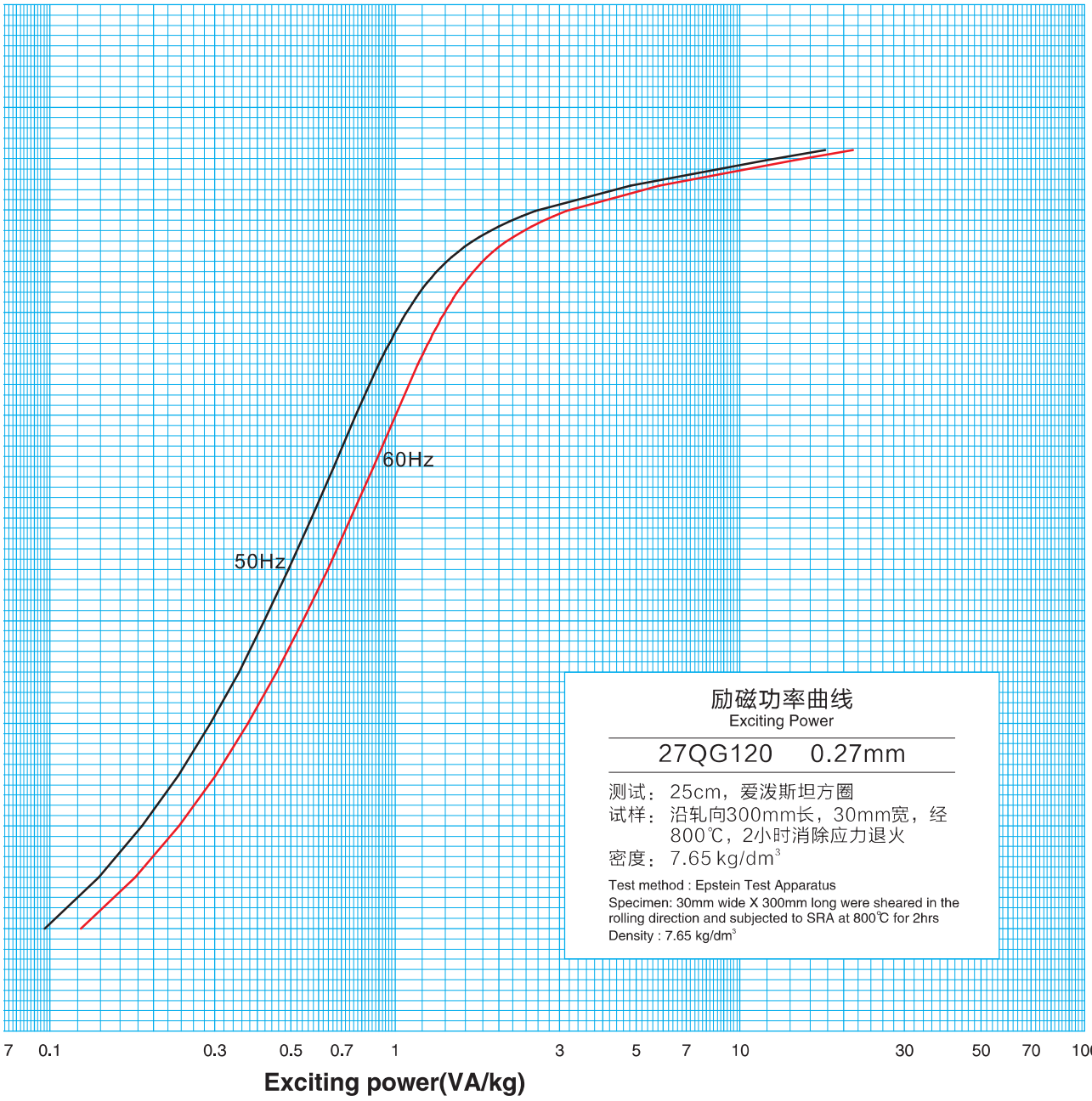
27QG120

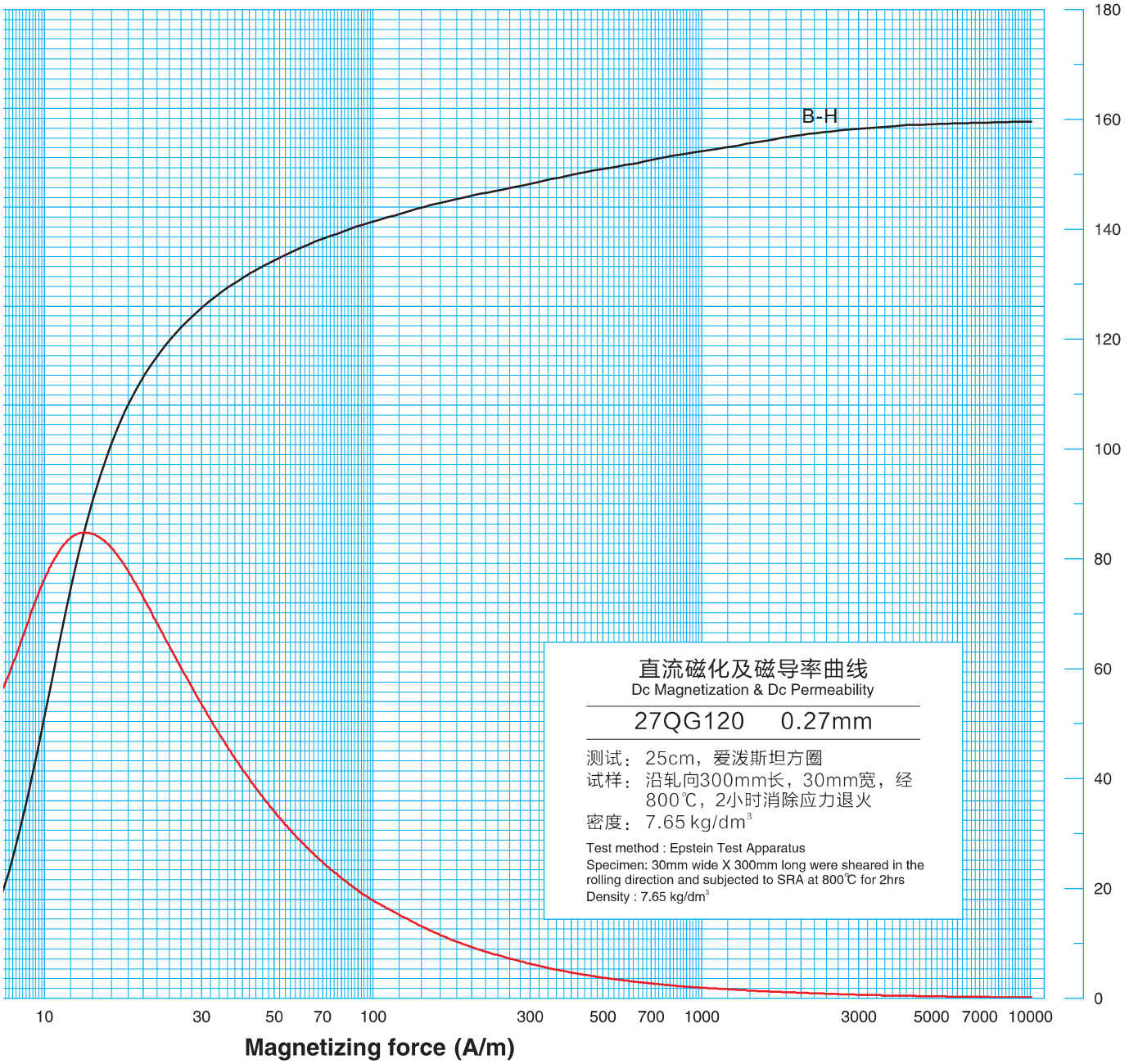
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.062	0.097	0.082	0.123	1.62	0.904	1.123	1.189	1.447
0.50	0.093	0.139	0.123	0.177	1.63	0.918	1.149	1.207	1.478
0.60	0.130	0.185	0.172	0.236	1.64	0.933	1.177	1.226	1.512
0.70	0.172	0.235	0.227	0.302	1.65	0.949	1.207	1.245	1.549
0.80	0.220	0.291	0.289	0.374	1.66	0.965	1.240	1.265	1.589
0.90	0.274	0.352	0.361	0.454	1.67	0.981	1.277	1.286	1.633
1.00	0.334	0.419	0.441	0.541	1.68	0.998	1.313	1.308	1.677
1.10	0.402	0.492	0.530	0.638	1.69	1.017	1.357	1.330	1.728
1.20	0.478	0.574	0.630	0.745	1.70	1.036	1.405	1.354	1.784
1.30	0.560	0.664	0.740	0.866	1.71	1.055	1.460	1.379	1.849
1.40	0.652	0.769	0.862	1.002	1.72	1.077	1.522	1.404	1.922
1.50	0.755	0.897	0.997	1.165	1.73	1.100	1.588	1.433	2.003
1.51	0.766	0.910	1.012	1.184	1.74	1.124	1.670	1.462	2.100
1.52	0.778	0.926	1.027	1.204	1.75	1.149	1.760	1.492	2.210
1.53	0.789	0.942	1.041	1.223	1.76	1.176	1.871	1.527	2.335
1.54	0.801	0.959	1.056	1.244	1.77	1.204	1.995	1.563	2.485
1.55	0.813	0.978	1.072	1.266	1.78	1.236	2.149	1.602	2.667
1.56	0.825	0.993	1.088	1.288	1.79	1.270	2.333	1.644	2.883
1.57	0.838	1.014	1.103	1.310	1.80	1.306	2.555	1.689	3.141
1.58	0.850	1.033	1.120	1.335	1.85	1.524	4.810	1.959	5.833
1.59	0.863	1.054	1.137	1.360	1.90	1.784	11.872	2.283	14.344
1.60	0.876	1.075	1.153	1.388	1.91	1.850	15.932	2.367	19.190
1.61	0.890	1.098	1.171	1.419	1.92	1.878	17.672	2.403	21.267

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	10	0.775	60	1.718	402	1.866	3018	1.959
3	0.073	12	1.033	70	1.736	502	1.878	4021	1.965
4	0.134	15	1.275	80	1.750	603	1.887	5025	1.968
5	0.195	18	1.405	90	1.762	703	1.896	6033	1.970
6	0.275	20	1.460	100	1.771	804	1.904	7037	1.971
7	0.370	30	1.597	151	1.805	1005	1.914	8042	1.972
8	0.489	40	1.658	201	1.824	1509	1.933	9050	1.973
9	0.630	50	1.693	302	1.848	2011	1.946	10056	1.973


60Hz
50Hz
铁损曲线
Core Loss
27QG120 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27QG120


60Hz
50Hz
励磁功率曲线
Exciting Power
27QG120 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

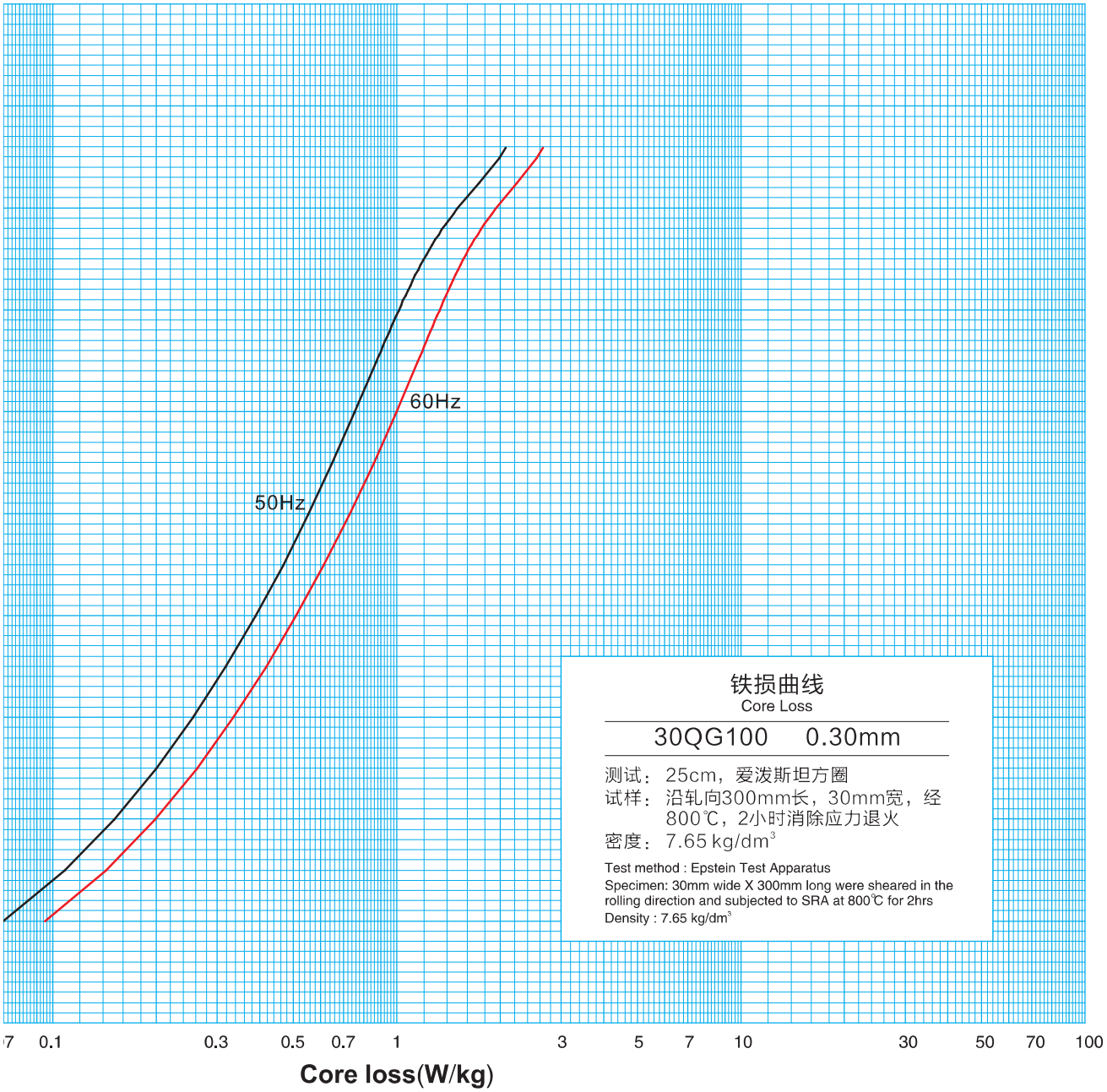

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27QG120 0.27mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

27QG120

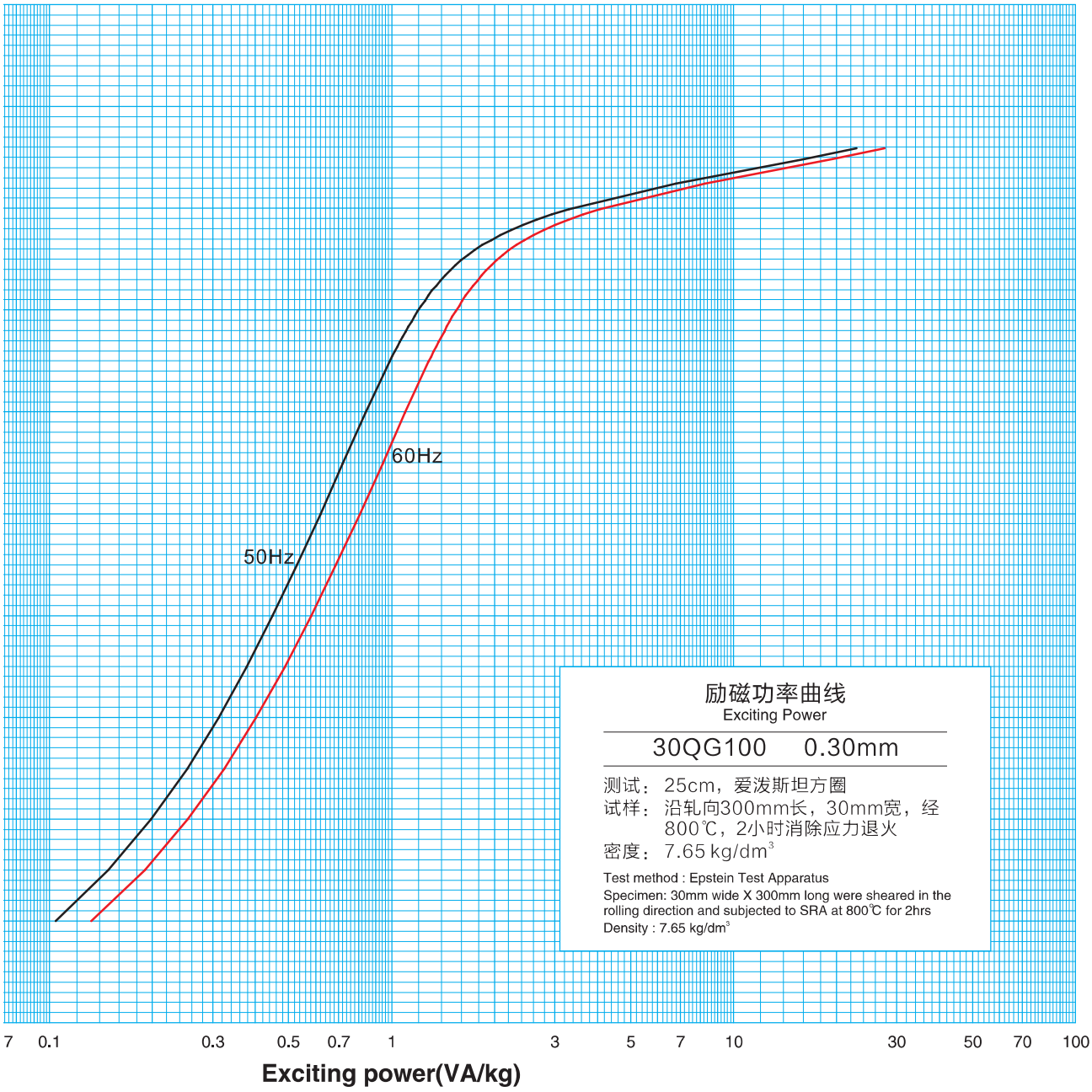
30QG100

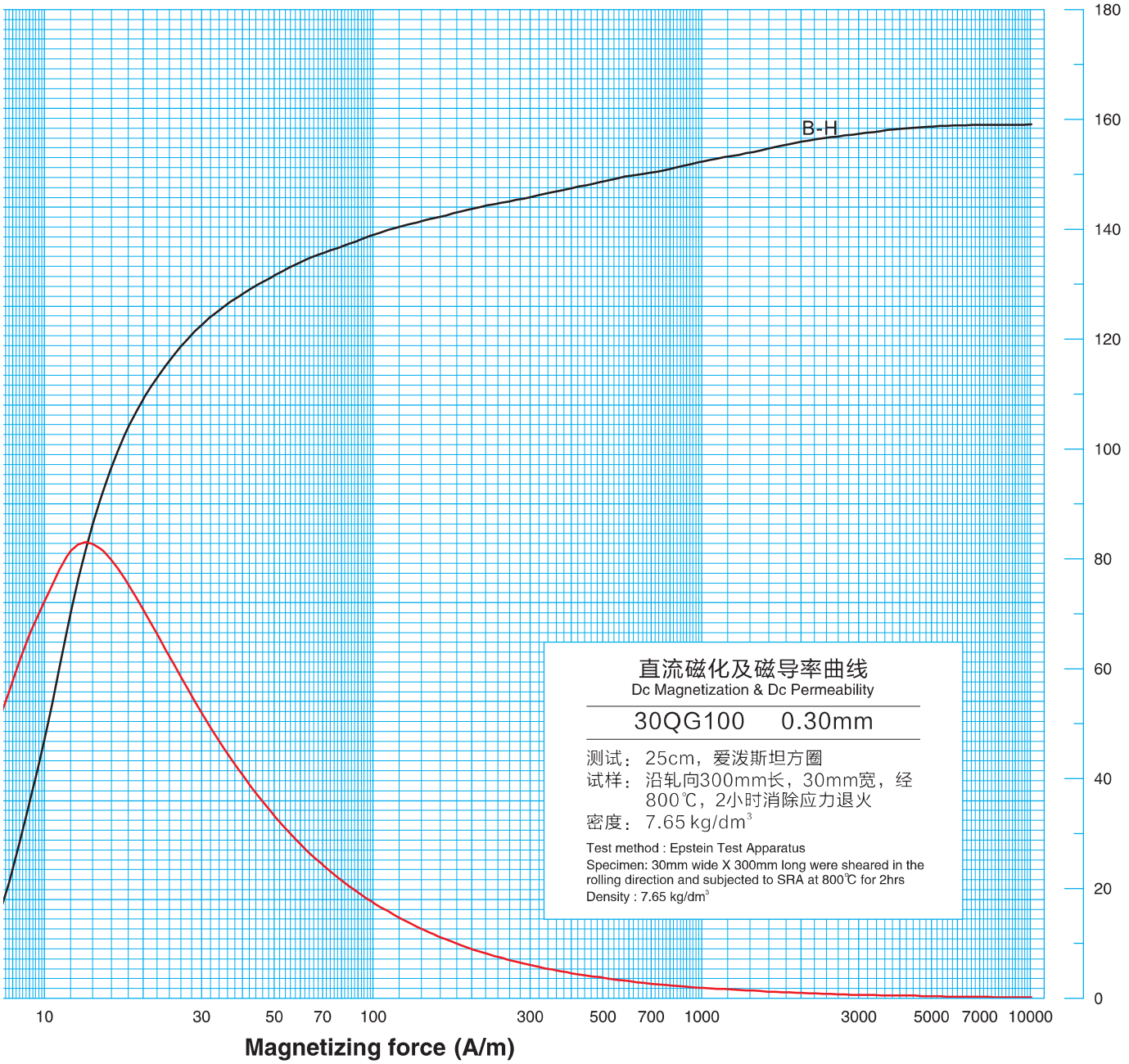
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.061	0.080	0.082	0.105	1.62	0.869	0.997	1.153	1.305
0.50	0.092	0.117	0.125	0.155	1.63	0.881	1.015	1.170	1.328
0.60	0.129	0.160	0.175	0.212	1.64	0.893	1.035	1.185	1.352
0.70	0.172	0.208	0.232	0.277	1.65	0.906	1.054	1.202	1.378
0.80	0.221	0.262	0.296	0.347	1.66	0.919	1.077	1.218	1.404
0.90	0.275	0.320	0.369	0.425	1.67	0.932	1.099	1.235	1.433
1.00	0.336	0.385	0.449	0.510	1.68	0.946	1.124	1.252	1.464
1.10	0.403	0.456	0.538	0.604	1.69	0.960	1.151	1.271	1.496
1.20	0.476	0.534	0.636	0.708	1.70	0.975	1.180	1.288	1.531
1.30	0.556	0.619	0.743	0.821	1.71	0.991	1.209	1.309	1.566
1.40	0.643	0.715	0.859	0.945	1.72	1.006	1.243	1.328	1.608
1.50	0.738	0.824	0.984	1.086	1.73	1.023	1.283	1.348	1.652
1.51	0.747	0.835	0.997	1.102	1.74	1.041	1.324	1.371	1.702
1.52	0.758	0.848	1.011	1.117	1.75	1.060	1.373	1.394	1.759
1.53	0.768	0.860	1.025	1.134	1.76	1.080	1.426	1.419	1.822
1.54	0.779	0.874	1.038	1.151	1.77	1.101	1.487	1.444	1.892
1.55	0.790	0.887	1.052	1.168	1.78	1.124	1.556	1.472	1.976
1.56	0.800	0.901	1.066	1.185	1.79	1.148	1.642	1.502	2.076
1.57	0.811	0.915	1.080	1.204	1.80	1.176	1.734	1.535	2.185
1.58	0.822	0.931	1.095	1.222	1.85	1.357	2.664	1.755	3.278
1.59	0.833	0.946	1.109	1.242	1.90	1.613	5.874	2.075	7.104
1.60	0.845	0.962	1.124	1.262	1.91	1.694	7.910	2.186	9.534
1.61	0.857	0.979	1.138	1.283	1.92	1.729	8.783	2.233	10.576

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.047	10	1.307	60	1.777	402	1.900	3018	1.968
3	0.121	12	1.421	70	1.792	502	1.911	4021	1.970
4	0.244	15	1.515	80	1.805	603	1.920	5026	1.972
5	0.475	18	1.573	90	1.814	703	1.926	6032	1.973
6	0.739	20	1.601	100	1.823	804	1.933	7038	1.974
7	0.964	30	1.688	151	1.851	1005	1.942	8043	1.975
8	1.113	40	1.730	201	1.868	1508	1.954	9049	1.975
9	1.226	50	1.758	302	1.888	2012	1.962	10055	1.975


60Hz
50Hz
铁损曲线
Core Loss
30QG100 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30QG100


60Hz
50Hz
励磁功率曲线
Exciting Power
30QG100 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

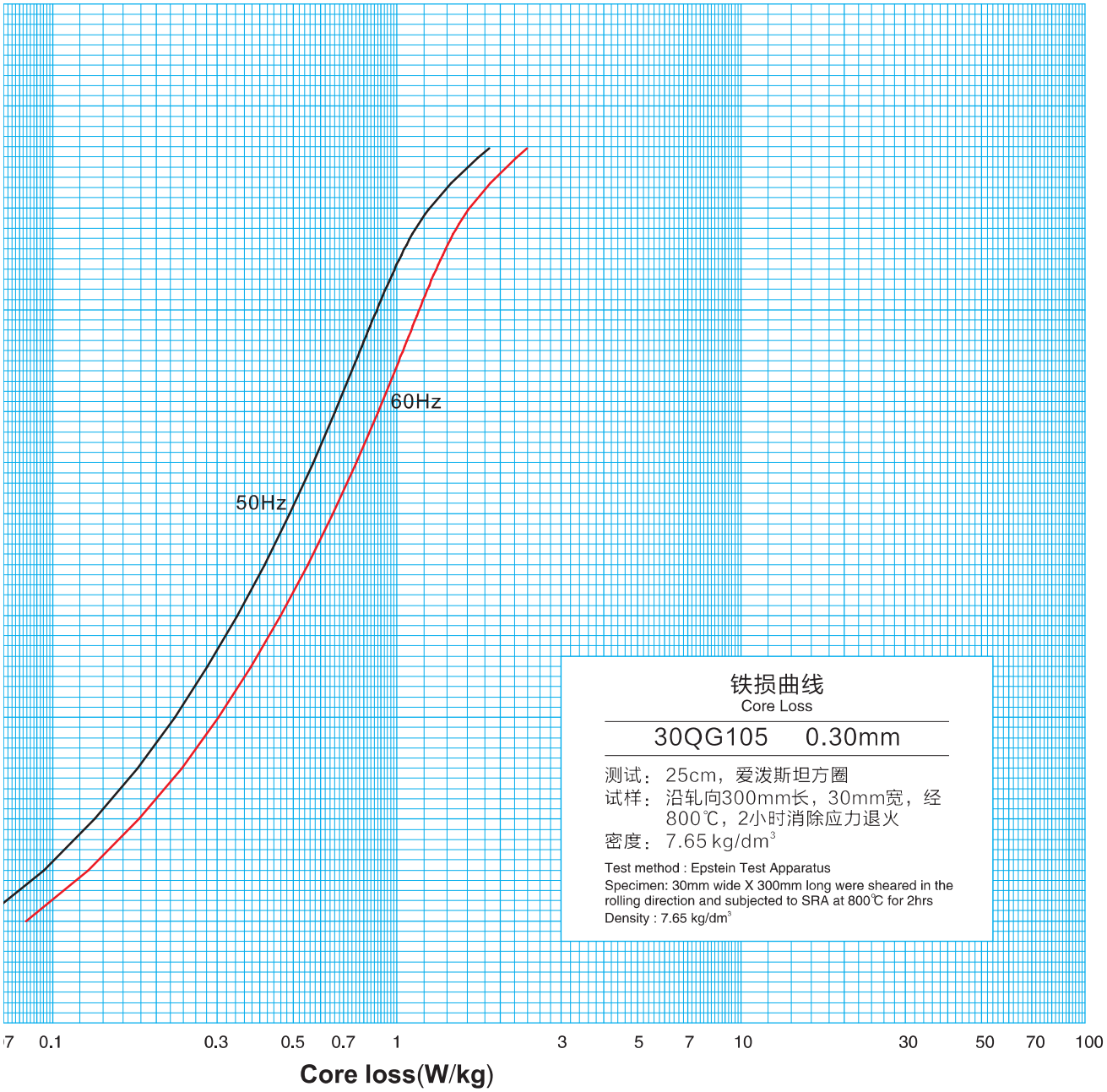

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30QG100 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³

30QG100

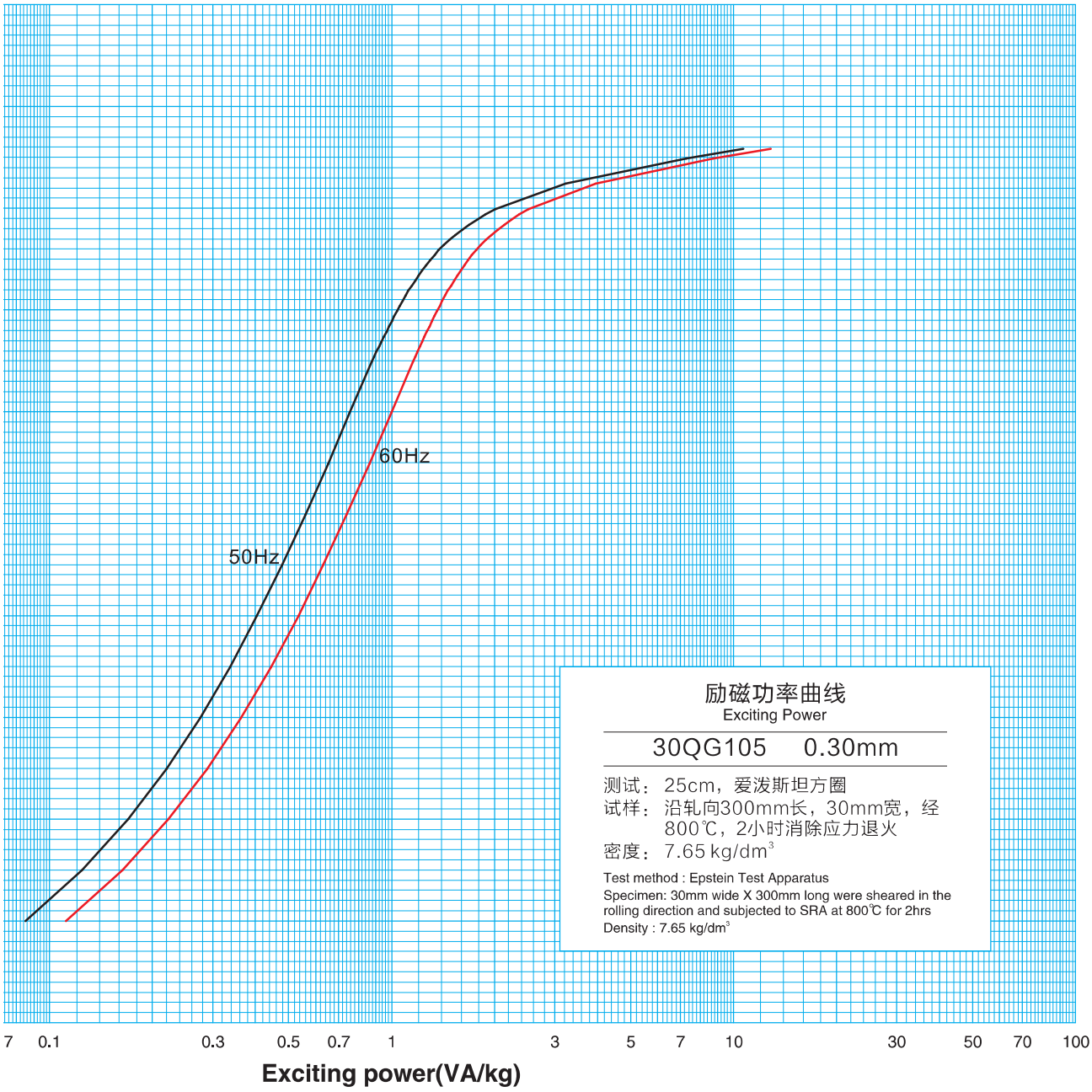
30QG105

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.062	0.085	0.084	0.112	1.62	0.898	1.077	1.191	1.407
0.50	0.094	0.125	0.127	0.163	1.63	0.911	1.099	1.208	1.436
0.60	0.132	0.170	0.178	0.223	1.64	0.925	1.122	1.225	1.463
0.70	0.176	0.220	0.236	0.289	1.65	0.938	1.147	1.243	1.492
0.80	0.226	0.275	0.302	0.363	1.66	0.953	1.173	1.260	1.525
0.90	0.281	0.338	0.377	0.444	1.67	0.968	1.199	1.279	1.559
1.00	0.343	0.405	0.459	0.535	1.68	0.983	1.231	1.299	1.594
1.10	0.412	0.479	0.550	0.632	1.69	0.998	1.261	1.318	1.632
1.20	0.487	0.560	0.651	0.741	1.70	1.015	1.297	1.339	1.673
1.30	0.570	0.652	0.761	0.863	1.71	1.032	1.335	1.361	1.721
1.40	0.660	0.755	0.882	0.997	1.72	1.049	1.376	1.383	1.772
1.50	0.759	0.877	1.012	1.156	1.73	1.068	1.424	1.406	1.828
1.51	0.770	0.891	1.026	1.174	1.74	1.088	1.480	1.431	1.891
1.52	0.781	0.904	1.040	1.192	1.75	1.110	1.539	1.457	1.960
1.53	0.792	0.919	1.054	1.209	1.76	1.132	1.607	1.484	2.043
1.54	0.803	0.934	1.069	1.229	1.77	1.156	1.686	1.513	2.136
1.55	0.814	0.950	1.083	1.249	1.78	1.181	1.776	1.545	2.239
1.56	0.825	0.966	1.098	1.269	1.79	1.210	1.886	1.579	2.365
1.57	0.837	0.983	1.113	1.290	1.80	1.241	2.007	1.617	2.514
1.58	0.848	1.000	1.128	1.311	1.85	1.440	3.229	1.865	3.953
1.59	0.860	1.018	1.143	1.334	1.90	1.720	7.269	2.225	8.702
1.60	0.874	1.037	1.159	1.359	1.91	1.813	9.651	2.341	11.604
1.61	0.885	1.056	1.175	1.383	1.92	1.853	10.672	2.390	12.848

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.051	10	1.169	60	1.755	402	1.894	3017	1.972
3	0.117	12	1.318	70	1.772	502	1.905	4020	1.976
4	0.211	15	1.444	80	1.785	603	1.914	5026	1.978
5	0.352	18	1.519	90	1.797	703	1.921	6031	1.979
6	0.537	20	1.552	100	1.806	804	1.928	7037	1.980
7	0.727	30	1.652	151	1.838	1005	1.938	8042	1.982
8	0.901	40	1.702	201	1.856	1509	1.954	9048	1.981
9	1.057	50	1.732	302	1.877	2011	1.964	10050	1.983


60Hz
50Hz
铁损曲线
Core Loss
30QG105 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30QG105

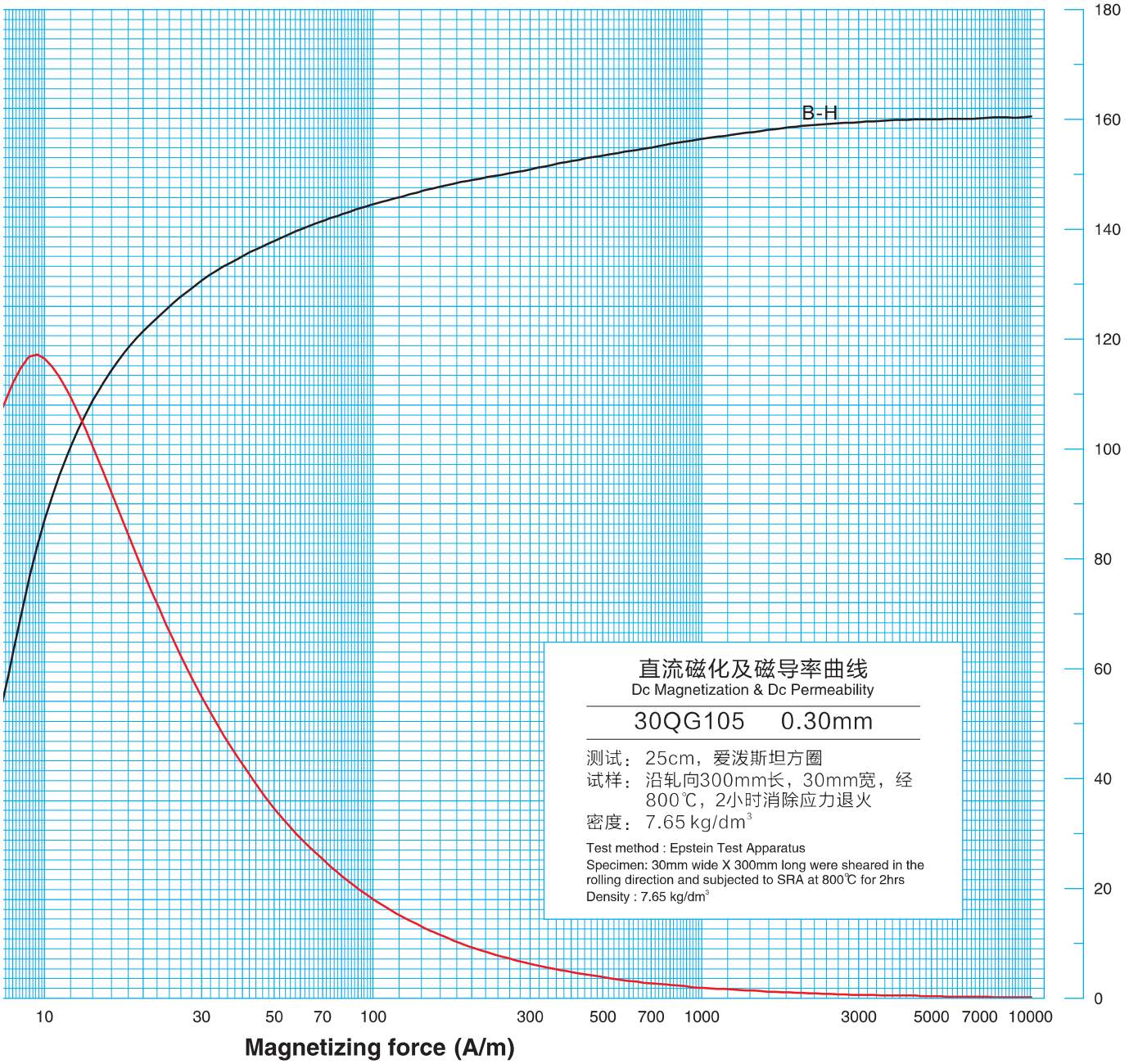


励磁功率曲线
Exciting Power

30QG105 0.30mm

测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

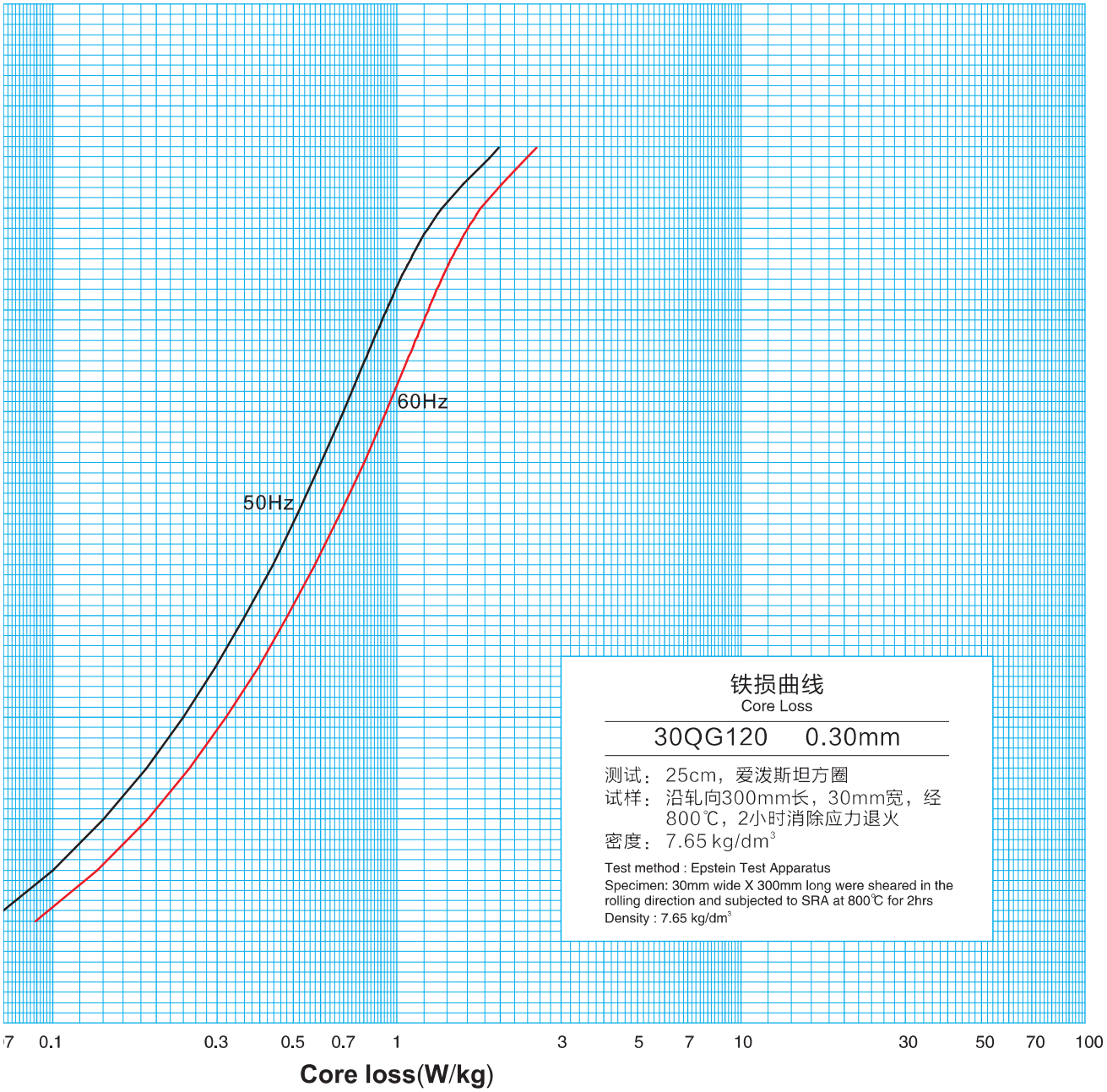

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30QG105 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

30QG105

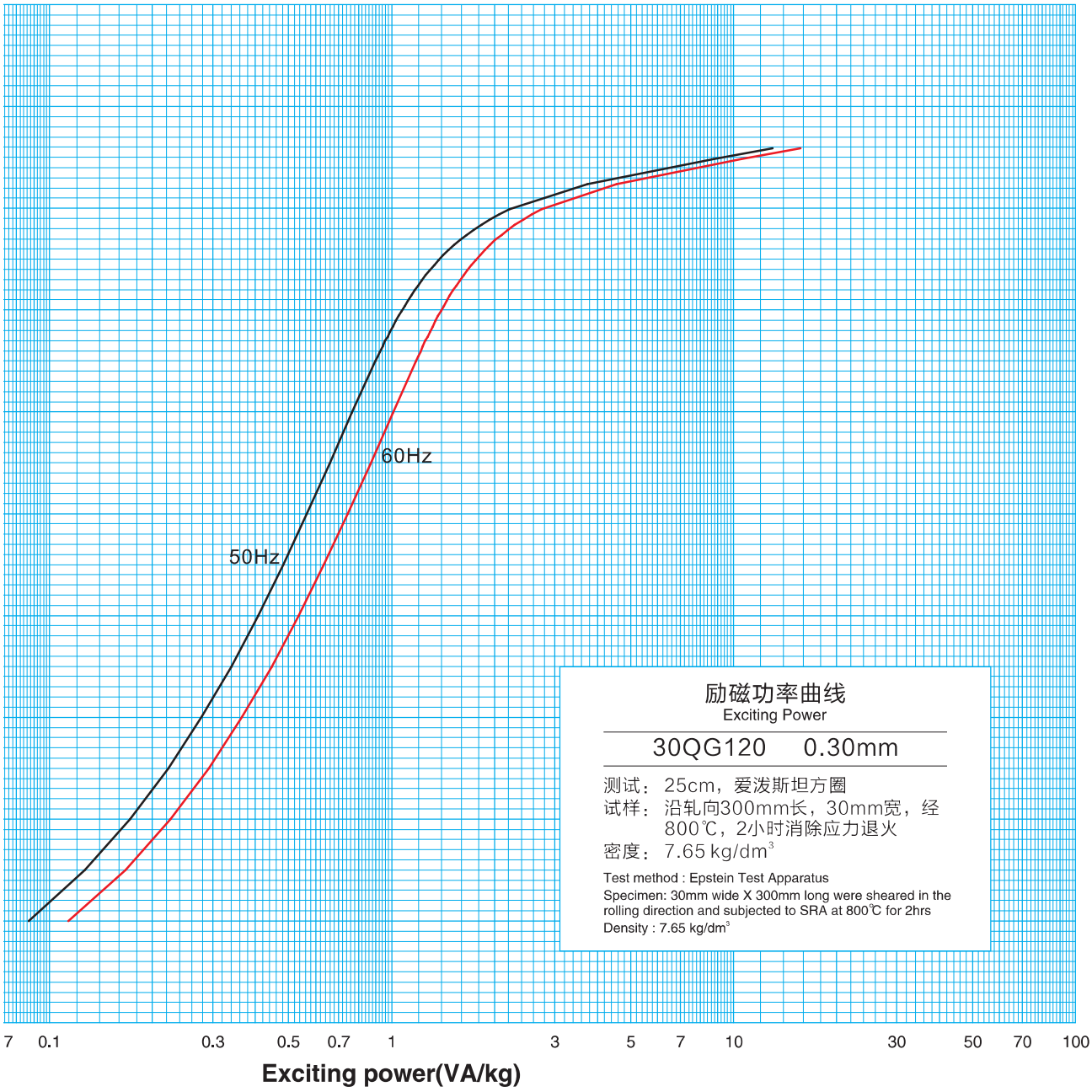
30QG120

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.066	0.087	0.089	0.113	1.62	0.960	1.116	1.267	1.451
0.50	0.100	0.127	0.134	0.166	1.63	0.976	1.142	1.287	1.480
0.60	0.140	0.172	0.189	0.226	1.64	0.988	1.169	1.305	1.514
0.70	0.187	0.223	0.249	0.293	1.65	1.005	1.196	1.325	1.549
0.80	0.240	0.278	0.318	0.366	1.66	1.021	1.225	1.346	1.585
0.90	0.297	0.339	0.396	0.446	1.67	1.038	1.258	1.369	1.625
1.00	0.362	0.407	0.482	0.536	1.68	1.056	1.292	1.389	1.665
1.10	0.435	0.482	0.578	0.634	1.69	1.074	1.332	1.411	1.713
1.20	0.514	0.565	0.684	0.745	1.70	1.094	1.372	1.435	1.761
1.30	0.601	0.658	0.801	0.869	1.71	1.113	1.418	1.460	1.816
1.40	0.698	0.766	0.929	1.009	1.72	1.135	1.469	1.484	1.876
1.50	0.806	0.895	1.069	1.177	1.73	1.155	1.525	1.513	1.941
1.51	0.818	0.911	1.084	1.195	1.74	1.178	1.588	1.539	2.013
1.52	0.828	0.925	1.099	1.214	1.75	1.201	1.656	1.569	2.100
1.53	0.840	0.941	1.116	1.234	1.76	1.229	1.739	1.599	2.188
1.54	0.852	0.957	1.131	1.253	1.77	1.256	1.831	1.633	2.296
1.55	0.865	0.975	1.147	1.276	1.78	1.285	1.935	1.670	2.427
1.56	0.877	0.992	1.164	1.298	1.79	1.314	2.064	1.706	2.574
1.57	0.890	1.010	1.180	1.319	1.80	1.350	2.214	1.749	2.749
1.58	0.904	1.028	1.198	1.344	1.85	1.561	3.731	2.021	4.551
1.59	0.918	1.049	1.214	1.370	1.90	1.853	8.752	2.382	10.507
1.60	0.931	1.070	1.231	1.395	1.91	1.938	11.720	2.493	14.132
1.61	0.945	1.093	1.250	1.422	1.92	1.974	12.992	2.540	15.686

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.063	10	1.093	60	1.742	402	1.884	3018	1.963
3	0.127	12	1.241	70	1.760	502	1.895	4021	1.969
4	0.213	15	1.372	80	1.774	603	1.904	5026	1.971
5	0.340	18	1.453	90	1.785	703	1.911	6032	1.972
6	0.509	20	1.495	100	1.794	804	1.918	7037	1.972
7	0.677	30	1.617	151	1.827	1005	1.928	8043	1.974
8	0.833	40	1.679	201	1.845	1508	1.945	9048	1.974
9	0.982	50	1.716	302	1.868	2011	1.954	10055	1.976


60Hz
50Hz
铁损曲线
Core Loss
30QG120 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm³
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30QG120

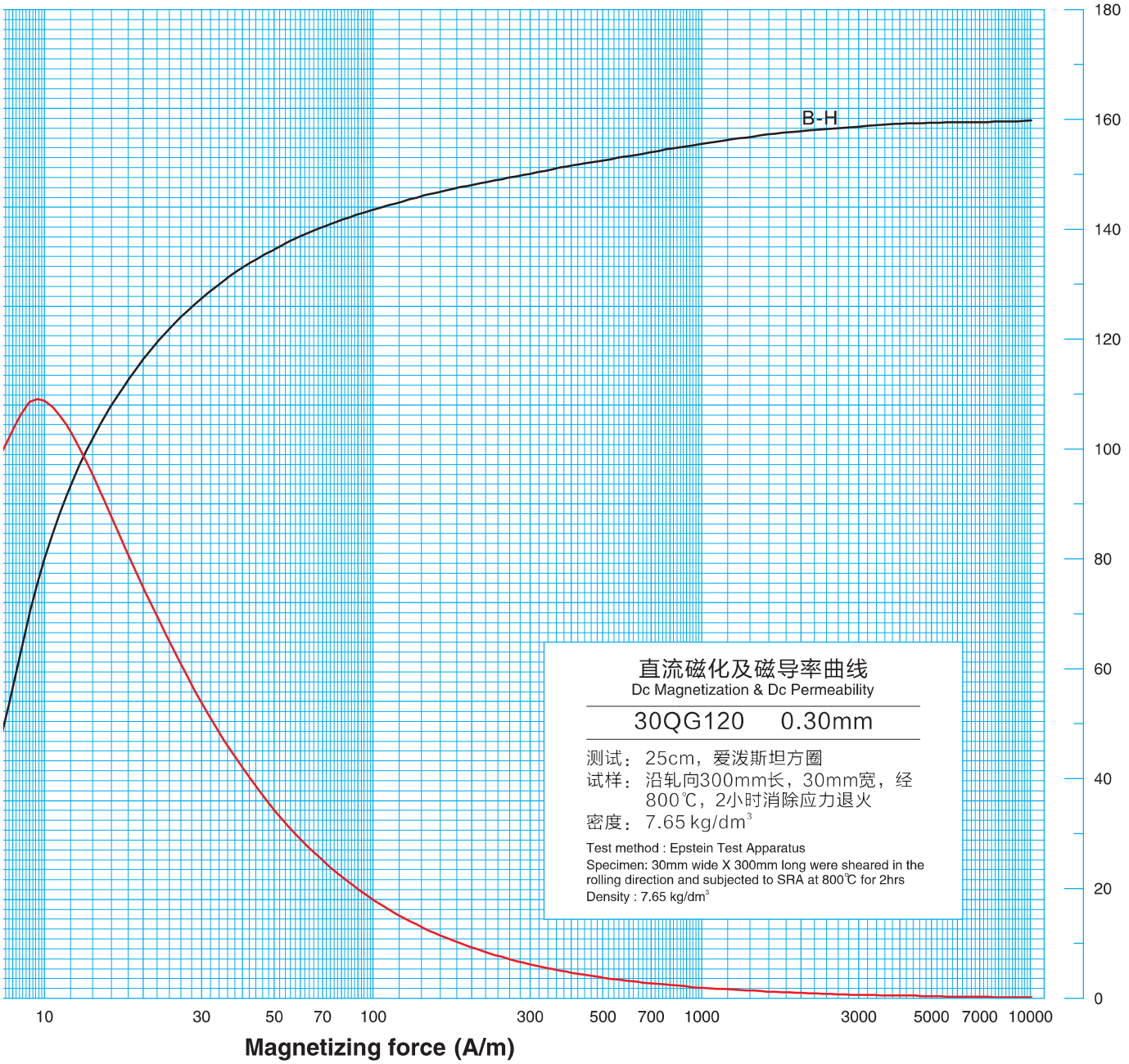


励磁功率曲线
Exciting Power

30QG120　0.30mm

测试：25cm，爱泼斯坦方圈
试样：沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度：7.65 kg/dm^3

Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm^3

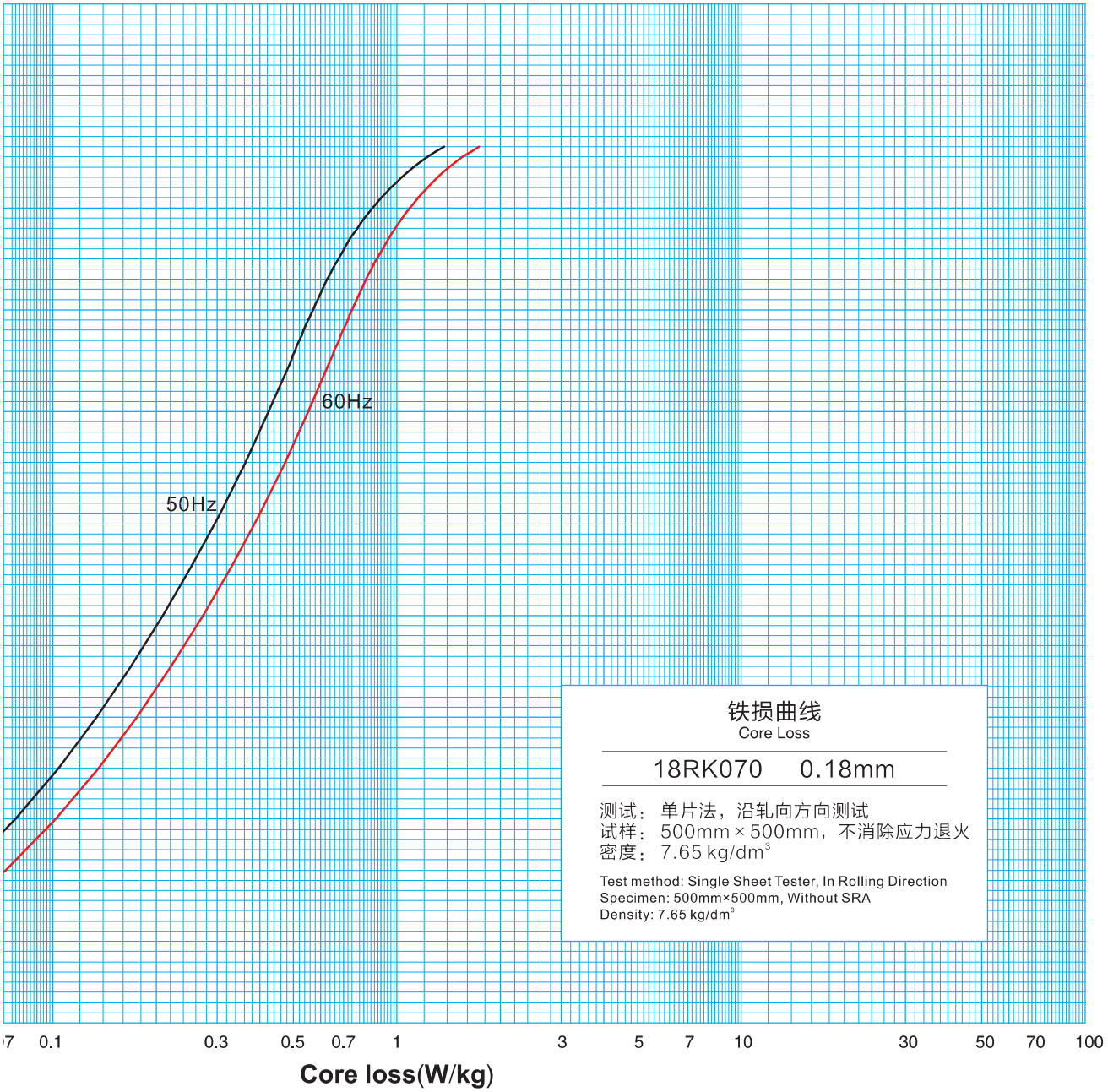

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30QG120 0.30mm
测试： 25cm，爱泼斯坦方圈
试样： 沿轧向300mm长，30mm宽，经800℃，2小时消除应力退火
密度： 7.65 kg/dm3
Test method : Epstein Test Apparatus
Specimen: 30mm wide X 300mm long were sheared in the rolling direction and subjected to SRA at 800℃ for 2hrs
Density : 7.65 kg/dm3

30QG120

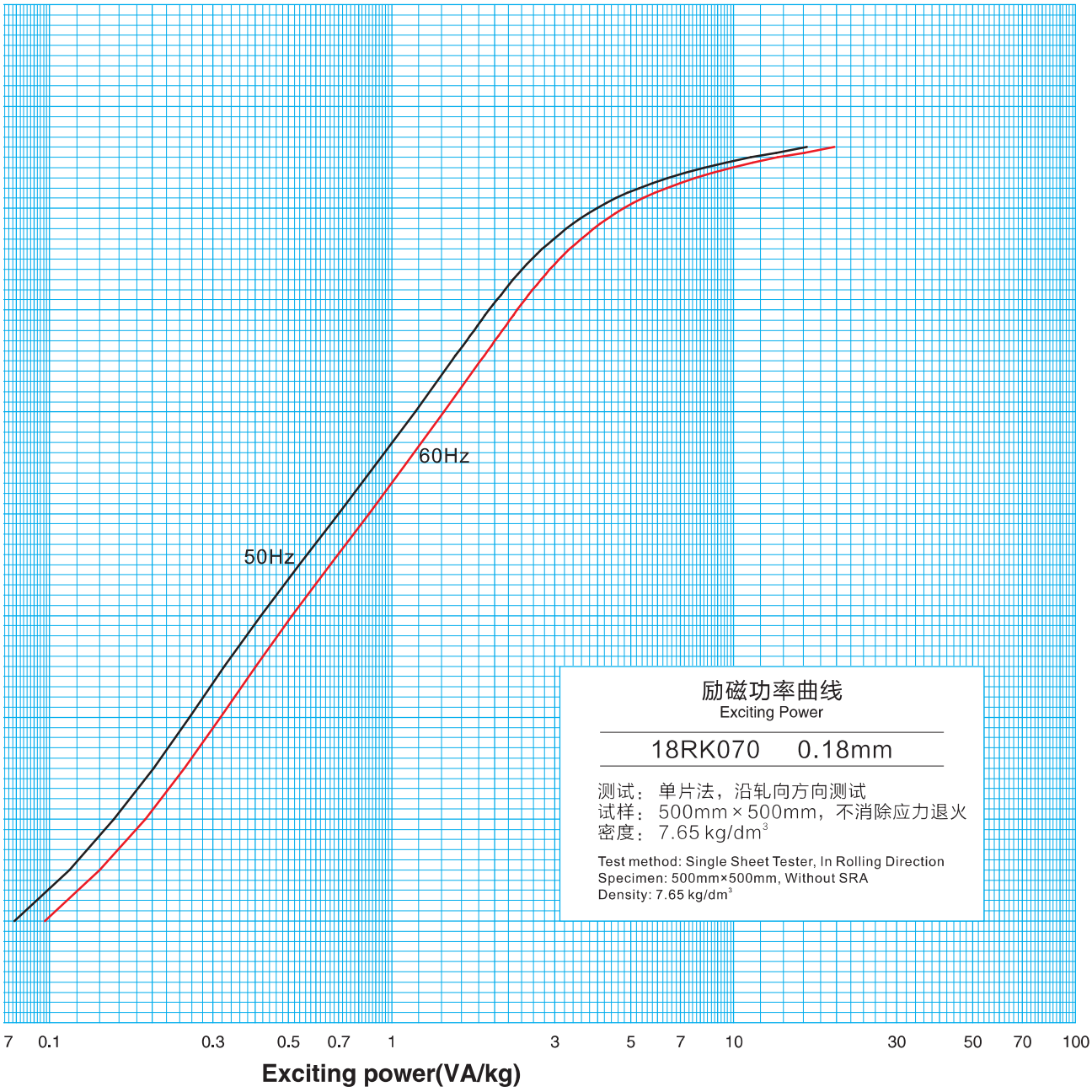
18RK070

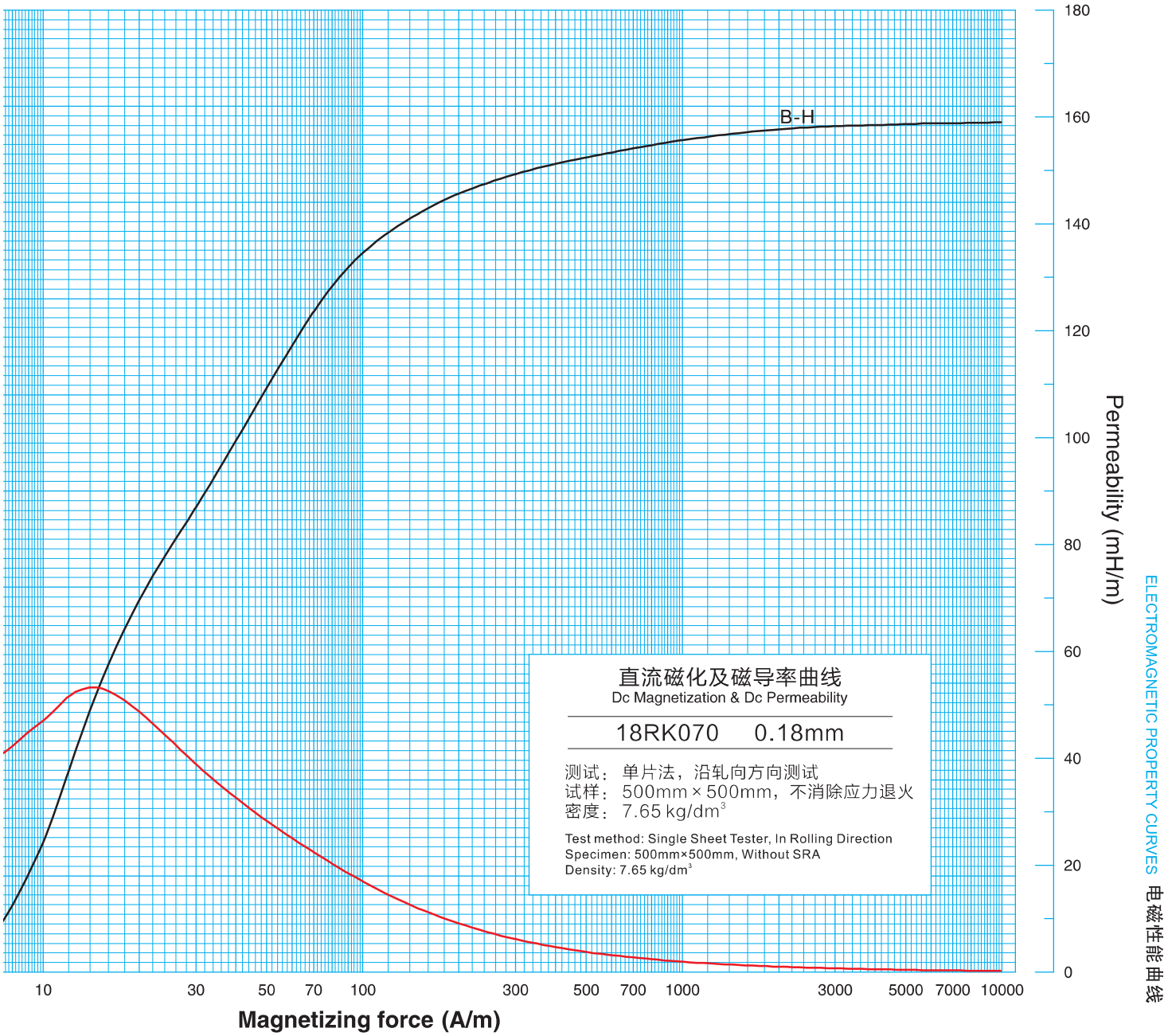
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.037	0.079	0.048	0.097	1.66	0.628	2.270	0.814	2.736
0.50	0.056	0.114	0.073	0.140	1.67	0.639	2.338	0.829	2.818
0.60	0.078	0.155	0.102	0.190	1.68	0.650	2.410	0.843	2.902
0.70	0.104	0.201	0.136	0.248	1.69	0.662	2.487	0.858	2.995
0.80	0.134	0.256	0.175	0.316	1.70	0.675	2.570	0.874	3.094
0.90	0.169	0.325	0.221	0.401	1.71	0.688	2.660	0.890	3.200
1.00	0.209	0.416	0.273	0.512	1.72	0.702	2.756	0.908	3.316
1.10	0.254	0.538	0.332	0.660	1.73	0.717	2.862	0.926	3.442
1.20	0.306	0.701	0.399	0.857	1.74	0.733	2.976	0.946	3.580
1.30	0.363	0.908	0.473	1.109	1.75	0.750	3.102	0.966	3.730
1.40	0.424	1.171	0.553	1.424	1.76	0.767	3.242	0.988	3.897
1.50	0.492	1.500	0.640	1.819	1.77	0.786	3.396	1.010	4.076
1.51	0.499	1.538	0.650	1.866	1.78	0.806	3.568	1.035	4.287
1.52	0.506	1.577	0.659	1.911	1.79	0.827	3.763	1.062	4.521
1.53	0.513	1.616	0.668	1.959	1.80	0.851	3.985	1.090	4.786
1.54	0.520	1.657	0.678	2.006	1.81	0.875	4.242	1.120	5.088
1.55	0.528	1.699	0.688	2.057	1.82	0.902	4.538	1.153	5.448
1.56	0.536	1.742	0.698	2.108	1.83	0.930	4.887	1.189	5.879
1.57	0.544	1.786	0.708	2.161	1.84	0.962	5.305	1.227	6.368
1.58	0.552	1.832	0.719	2.215	1.85	0.995	5.806	1.269	6.994
1.59	0.561	1.879	0.730	2.272	1.86	1.032	6.441	1.313	7.727
1.60	0.569	1.927	0.741	2.329	1.87	1.072	7.224	1.362	8.672
1.61	0.578	1.979	0.752	2.390	1.88	1.117	8.225	1.417	9.901
1.62	0.587	2.032	0.764	2.453	1.89	1.165	9.520	1.482	11.418
1.63	0.597	2.086	0.776	2.518	1.90	1.229	11.215	1.554	13.454
1.64	0.607	2.145	0.788	2.587	1.91	1.293	13.356	1.637	16.131
1.65	0.617	2.207	0.801	2.660	1.92	1.374	16.405	1.730	19.741

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.041	12	0.618	80	1.625	702	1.912	6020	1.964
3	0.077	15	0.809	90	1.665	797	1.919	7033	1.965
4	0.124	18	0.914	100	1.695	900	1.925	8071	1.965
5	0.171	20	0.971	150	1.778	1001	1.930	9001	1.966
6	0.221	30	1.167	200	1.818	1499	1.945	9905	1.967
7	0.277	40	1.305	300	1.858	2002	1.952		
8	0.341	49	1.409	400	1.880	2976	1.958		
9	0.405	60	1.502	502	1.894	4023	1.961		
10	0.484	70	1.572	603	1.904	5088	1.963		


60Hz
50Hz
铁损曲线
Core Loss
18RK070 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

18RK070


60Hz
50Hz
励磁功率曲线
Exciting Power
18RK070 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

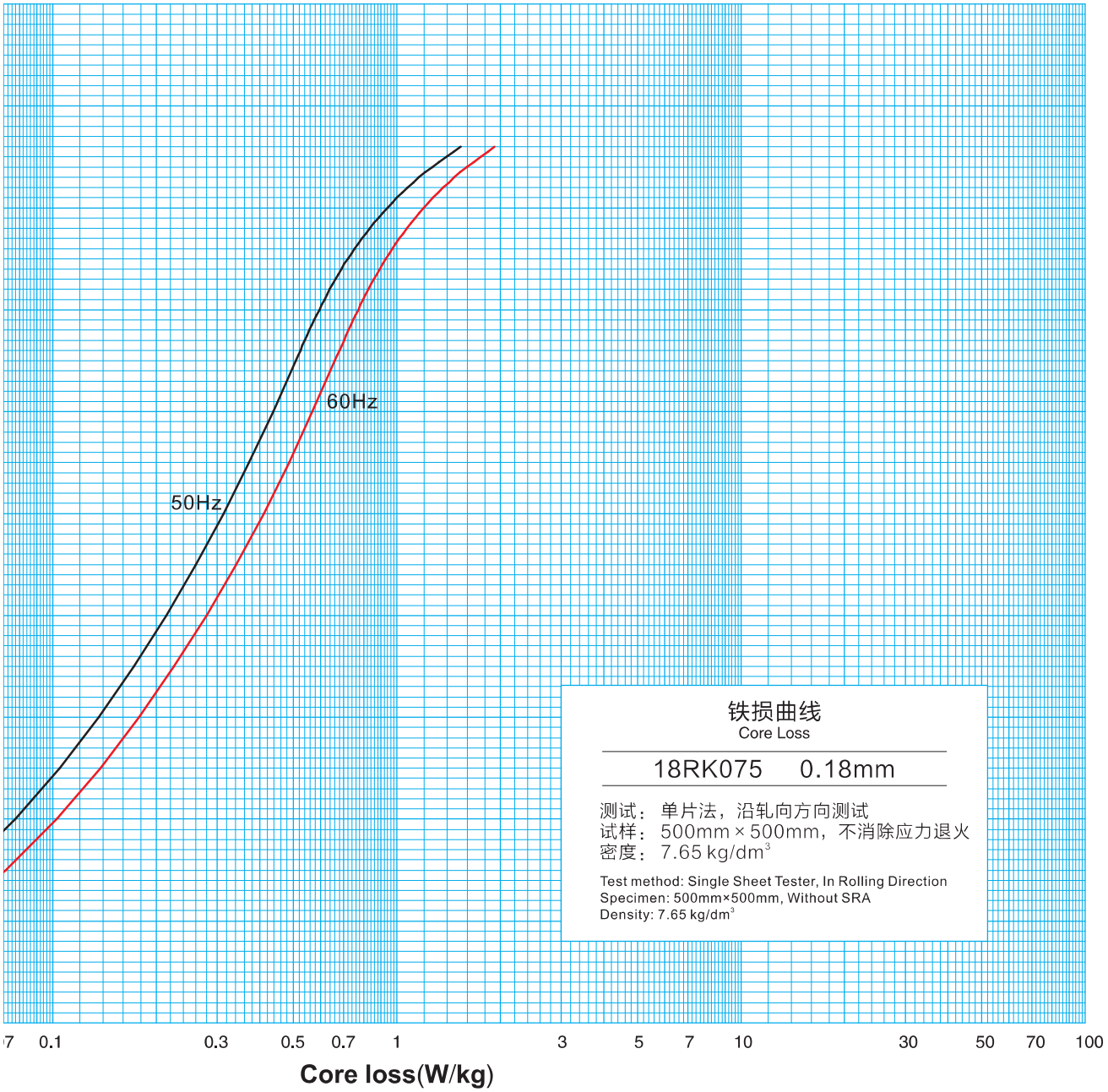

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
18RK070 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

18RK070

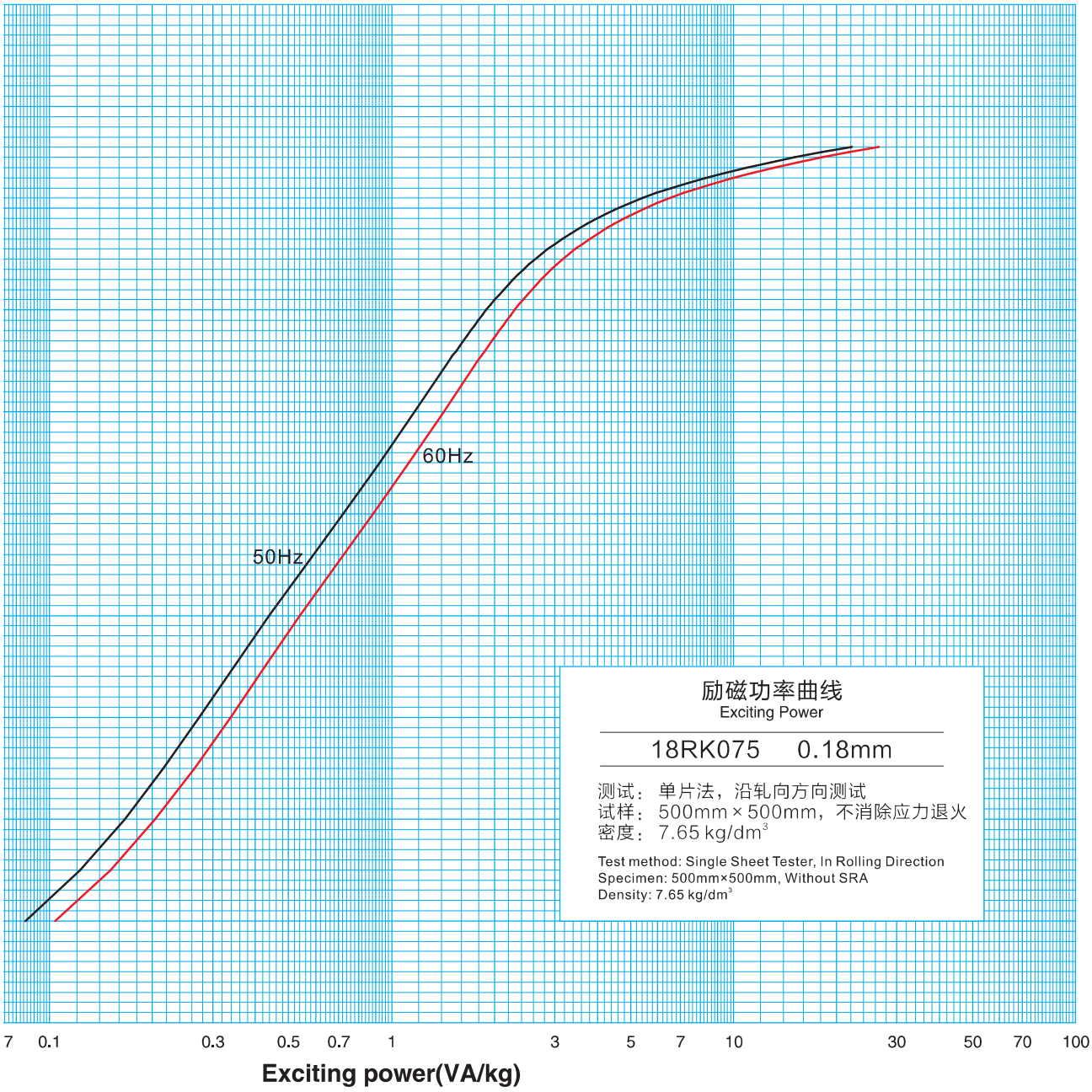
18RK075

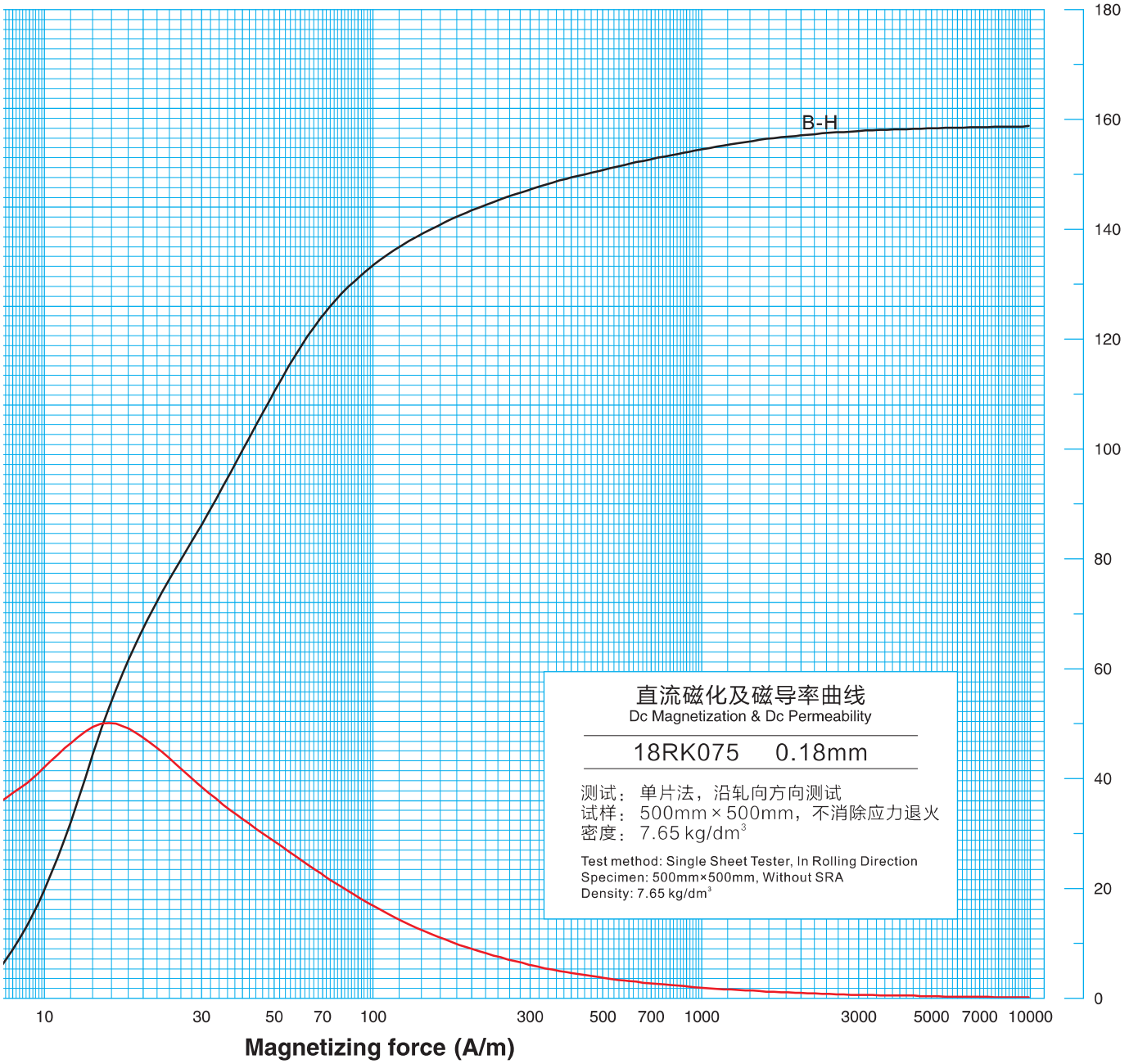
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.036	0.085	0.048	0.104	1.66	0.663	2.269	0.857	2.737
0.50	0.055	0.123	0.073	0.151	1.67	0.676	2.348	0.873	2.831
0.60	0.078	0.166	0.103	0.204	1.68	0.690	2.434	0.891	2.934
0.70	0.105	0.215	0.138	0.266	1.69	0.704	2.528	0.909	3.044
0.80	0.136	0.274	0.178	0.338	1.70	0.720	2.630	0.928	3.165
0.90	0.172	0.346	0.225	0.426	1.71	0.737	2.744	0.948	3.298
1.00	0.214	0.438	0.280	0.540	1.72	0.753	2.866	0.970	3.448
1.10	0.261	0.562	0.341	0.690	1.73	0.772	3.006	0.993	3.615
1.20	0.314	0.723	0.410	0.884	1.74	0.791	3.158	1.016	3.794
1.30	0.372	0.923	0.486	1.126	1.75	0.813	3.329	1.043	4.004
1.40	0.437	1.169	0.569	1.421	1.76	0.835	3.525	1.069	4.229
1.50	0.509	1.474	0.661	1.788	1.77	0.858	3.741	1.098	4.494
1.51	0.516	1.509	0.671	1.831	1.78	0.883	3.990	1.129	4.791
1.52	0.524	1.546	0.681	1.876	1.79	0.910	4.276	1.162	5.134
1.53	0.532	1.584	0.692	1.921	1.80	0.939	4.602	1.197	5.528
1.54	0.540	1.623	0.702	1.968	1.81	0.969	4.984	1.234	5.982
1.55	0.549	1.664	0.713	2.017	1.82	1.001	5.427	1.275	6.523
1.56	0.557	1.705	0.724	2.067	1.83	1.037	5.954	1.318	7.158
1.57	0.566	1.750	0.735	2.119	1.84	1.074	6.582	1.364	7.907
1.58	0.575	1.795	0.747	2.173	1.85	1.115	7.350	1.414	8.835
1.59	0.585	1.844	0.759	2.233	1.86	1.159	8.289	1.470	9.989
1.60	0.595	1.894	0.772	2.292	1.87	1.208	9.475	1.528	11.396
1.61	0.605	1.947	0.784	2.355	1.88	1.269	10.932	1.598	13.142
1.62	0.616	2.003	0.798	2.424	1.89	1.325	12.781	1.670	15.365
1.63	0.627	2.063	0.812	2.493	1.90	1.393	15.104	1.754	18.157
1.64	0.638	2.127	0.826	2.569	1.91	1.462	18.108	1.837	21.794
1.65	0.650	2.195	0.841	2.651	1.92	1.532	22.191	1.923	26.618

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.043	12	0.558	80	1.625	698	1.897	5927	1.961
3	0.075	15	0.746	90	1.656	799	1.905	7040	1.962
4	0.110	18	0.886	100	1.682	906	1.912	8094	1.963
5	0.151	20	0.937	150	1.756	1003	1.918	8995	1.963
6	0.197	30	1.157	200	1.794	1495	1.936	9865	1.964
7	0.245	40	1.307	301	1.837	1994	1.946		
8	0.299	50	1.427	399	1.860	2987	1.954		
9	0.360	60	1.517	502	1.876	3986	1.958		
10	0.415	70	1.580	600	1.888	4970	1.960		


60Hz
50Hz
铁损曲线
Core Loss
18RK075 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

18RK075


60Hz
50Hz
励磁功率曲线
Exciting Power
18RK075 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)



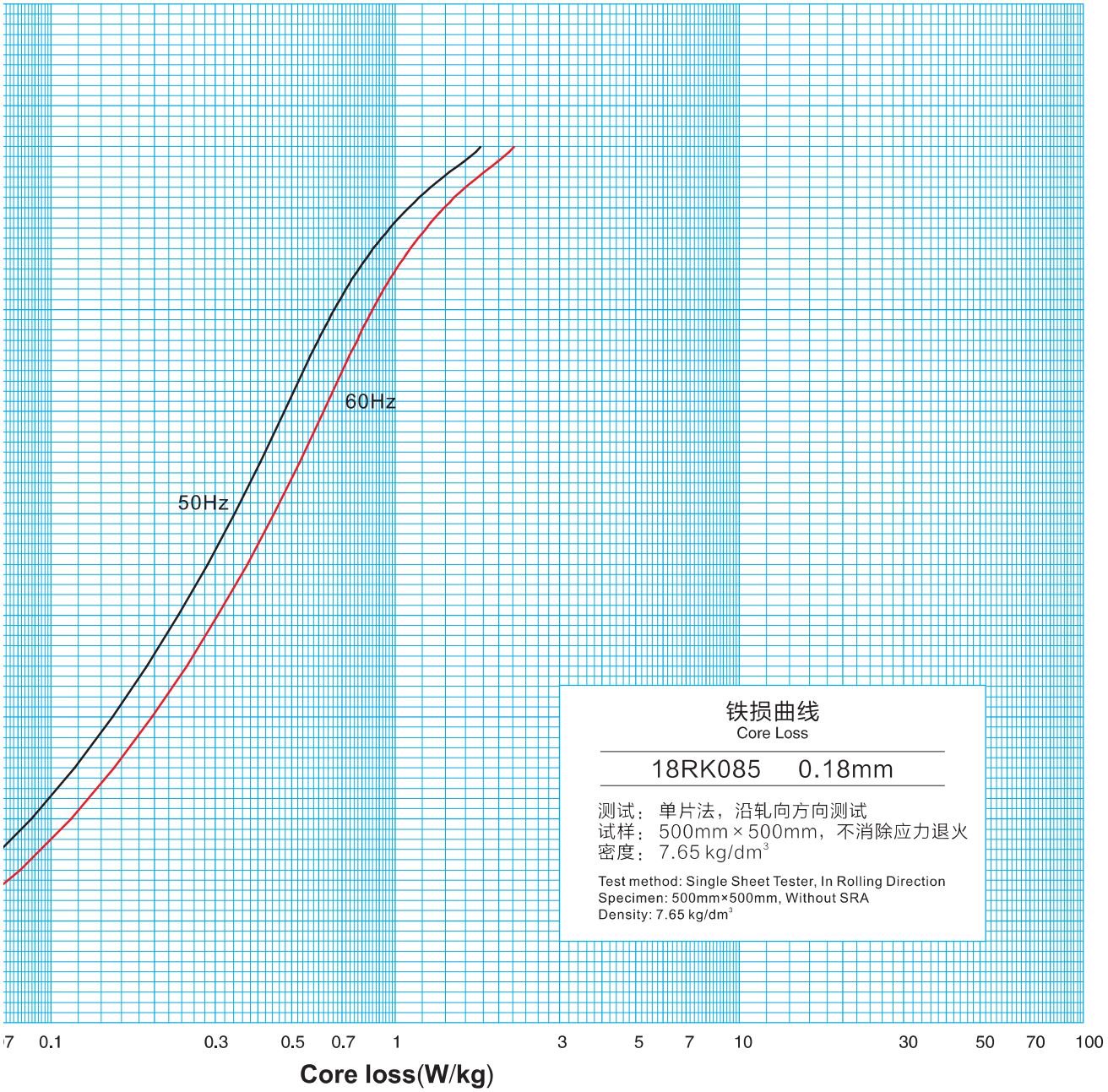
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

18RK075

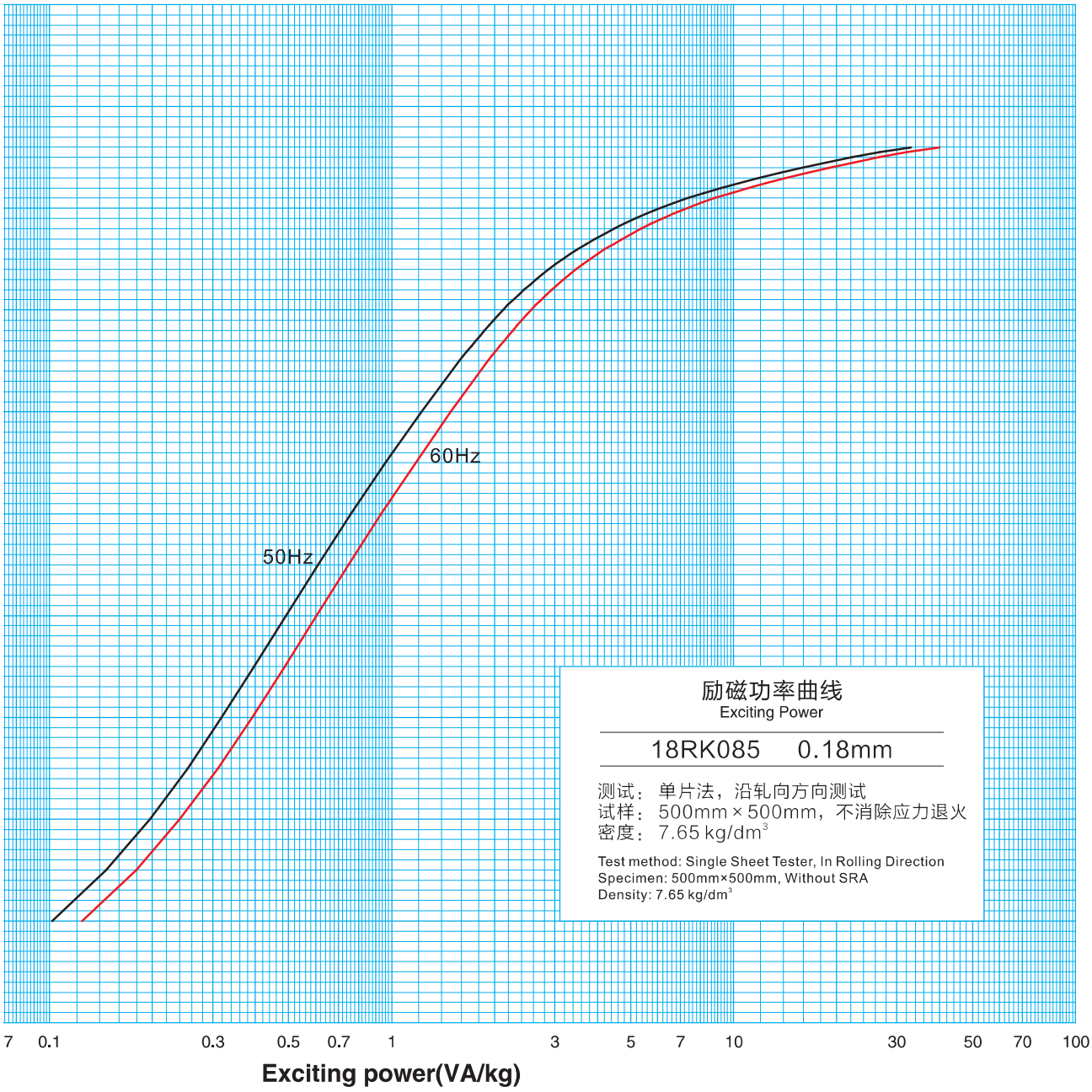
18RK085

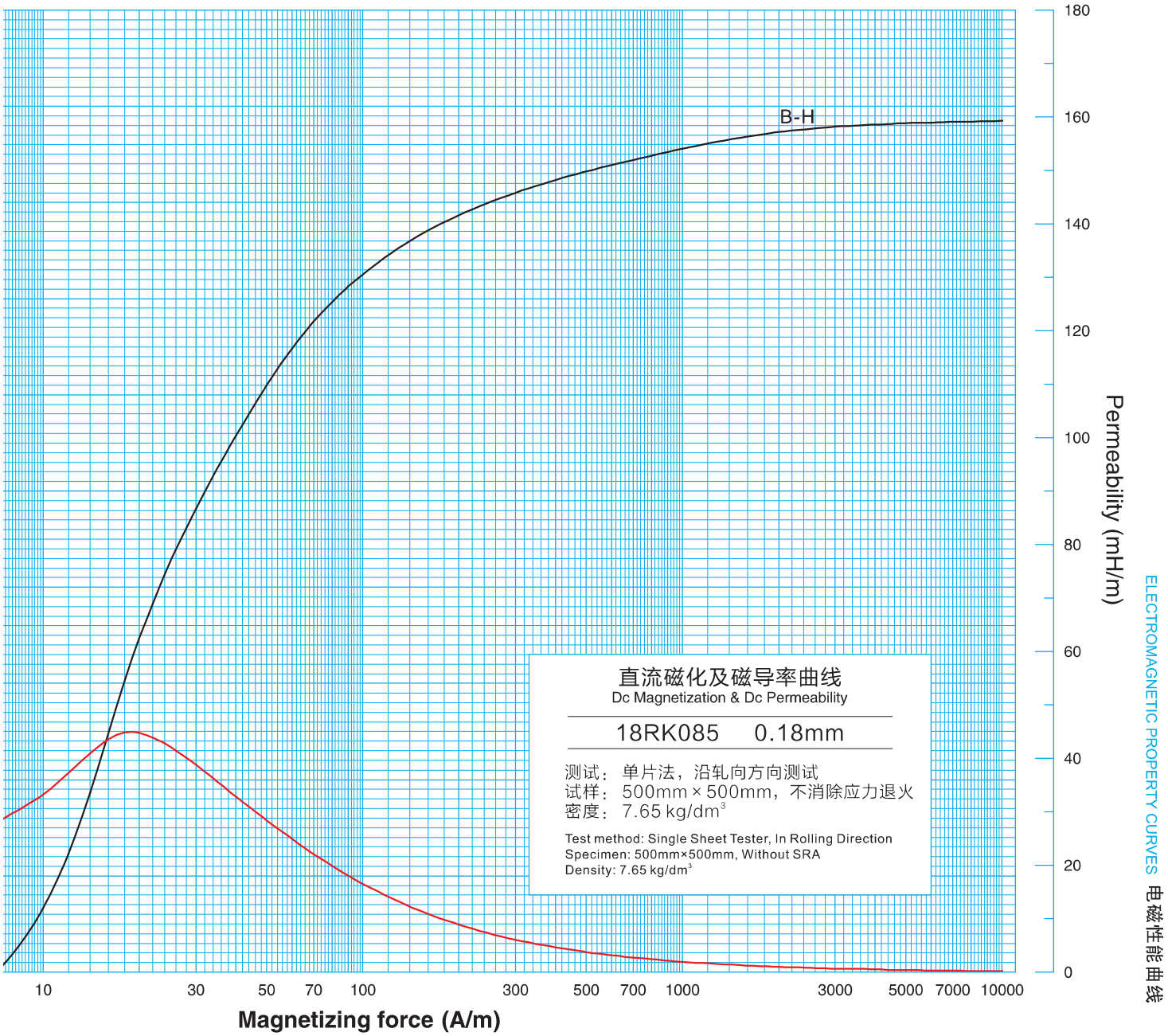
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.041	0.102	0.054	0.124	1.66	0.750	2.642	0.966	3.181
0.50	0.062	0.146	0.081	0.179	1.67	0.767	2.755	0.987	3.317
0.60	0.088	0.196	0.114	0.241	1.68	0.785	2.880	1.009	3.464
0.70	0.117	0.253	0.153	0.311	1.69	0.803	3.015	1.032	3.627
0.80	0.151	0.318	0.197	0.392	1.70	0.823	3.164	1.056	3.803
0.90	0.190	0.396	0.248	0.487	1.71	0.843	3.328	1.081	4.001
1.00	0.234	0.491	0.306	0.603	1.72	0.865	3.509	1.108	4.217
1.10	0.285	0.610	0.371	0.749	1.73	0.888	3.709	1.136	4.459
1.20	0.342	0.763	0.446	0.935	1.74	0.912	3.935	1.166	4.728
1.30	0.406	0.962	0.528	1.176	1.75	0.938	4.190	1.198	5.031
1.40	0.477	1.223	0.620	1.490	1.76	0.965	4.472	1.231	5.372
1.50	0.560	1.578	0.727	1.914	1.77	0.995	4.796	1.267	5.762
1.51	0.569	1.622	0.738	1.966	1.78	1.026	5.167	1.305	6.208
1.52	0.578	1.668	0.750	2.020	1.79	1.059	5.592	1.346	6.716
1.53	0.588	1.715	0.763	2.076	1.80	1.095	6.089	1.389	7.317
1.54	0.598	1.765	0.775	2.135	1.81	1.133	6.671	1.436	8.011
1.55	0.608	1.816	0.788	2.197	1.82	1.174	7.352	1.486	8.813
1.56	0.619	1.871	0.802	2.262	1.83	1.218	8.175	1.542	9.829
1.57	0.629	1.927	0.816	2.329	1.84	1.267	9.169	1.600	11.019
1.58	0.641	1.988	0.830	2.402	1.85	1.318	10.383	1.669	12.464
1.59	0.653	2.052	0.845	2.478	1.86	1.379	11.857	1.738	14.267
1.60	0.665	2.120	0.860	2.559	1.87	1.441	13.696	1.814	16.447
1.61	0.678	2.193	0.876	2.646	1.88	1.508	15.892	1.896	19.103
1.62	0.691	2.270	0.893	2.738	1.89	1.580	18.686	1.982	22.454
1.63	0.705	2.352	0.909	2.833	1.90	1.652	22.215	2.068	26.629
1.64	0.719	2.442	0.928	2.943	1.91	1.718	26.809	2.148	32.094
1.65	0.735	2.539	0.946	3.054	1.92	1.771	33.050	2.211	39.949

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.030	22	0.965	90	1.625	899	1.905	5469	1.965
4	0.082	24	1.027	100	1.652	1000	1.911	5992	1.966
6	0.153	26	1.078	150	1.731	1500	1.934	6530	1.967
8	0.238	28	1.123	200	1.773	1986	1.946	7086	1.967
10	0.333	30	1.162	299	1.820	2514	1.953	7376	1.967
12	0.447	40	1.315	400	1.847	2990	1.957	8083	1.968
14	0.572	50	1.420	500	1.864	3515	1.960	8619	1.968
16	0.702	60	1.496	599	1.877	3978	1.962	8965	1.969
18	0.809	70	1.551	697	1.888	4477	1.963	9459	1.969
20	0.894	80	1.593	798	1.897	4953	1.964	10002	1.970


60Hz
50Hz
铁损曲线
Core Loss
18RK085 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

18RK085


60Hz
50Hz
励磁功率曲线
Exciting Power
18RK085 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

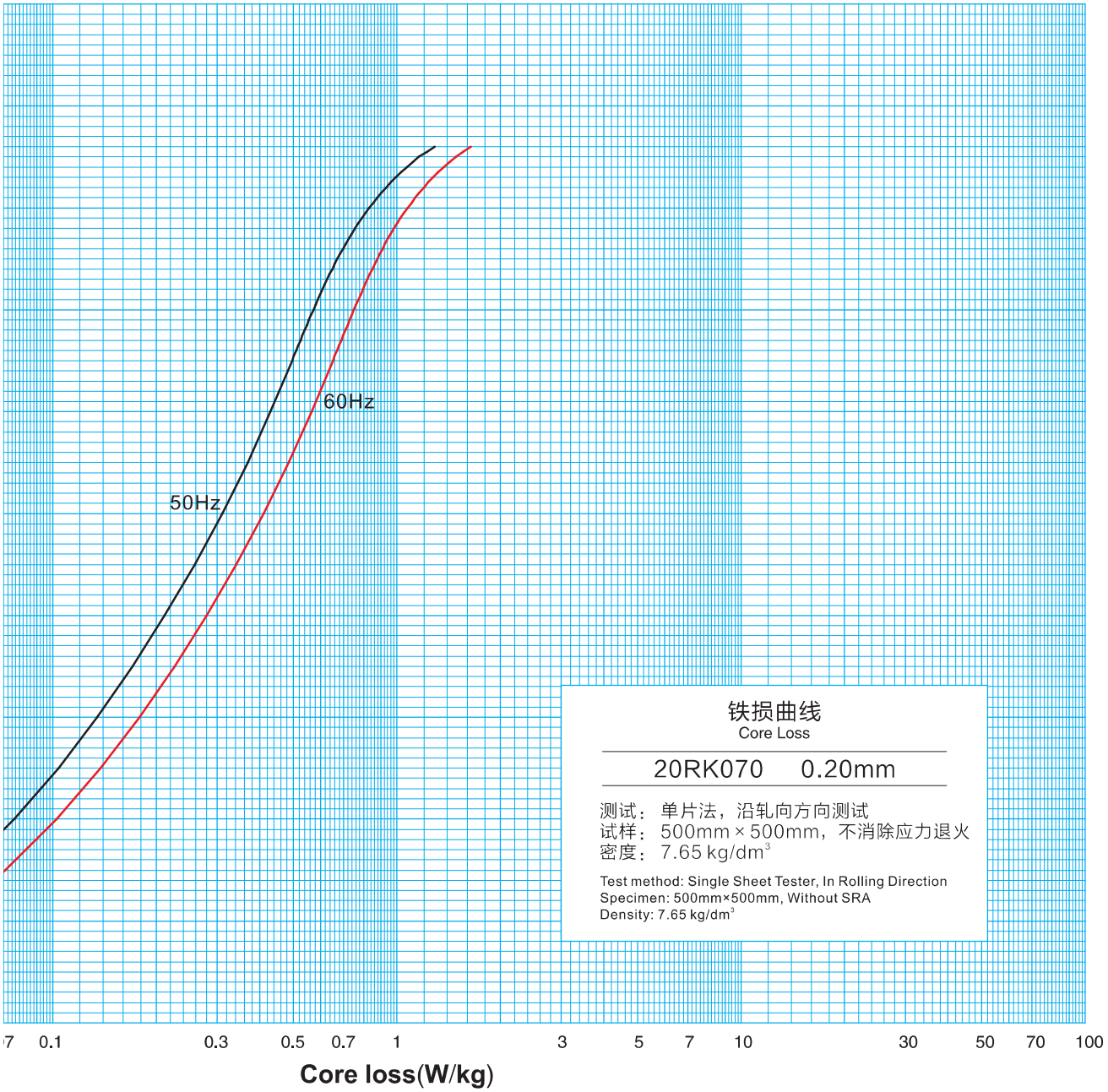

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
18RK085 0.18mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

18RK085

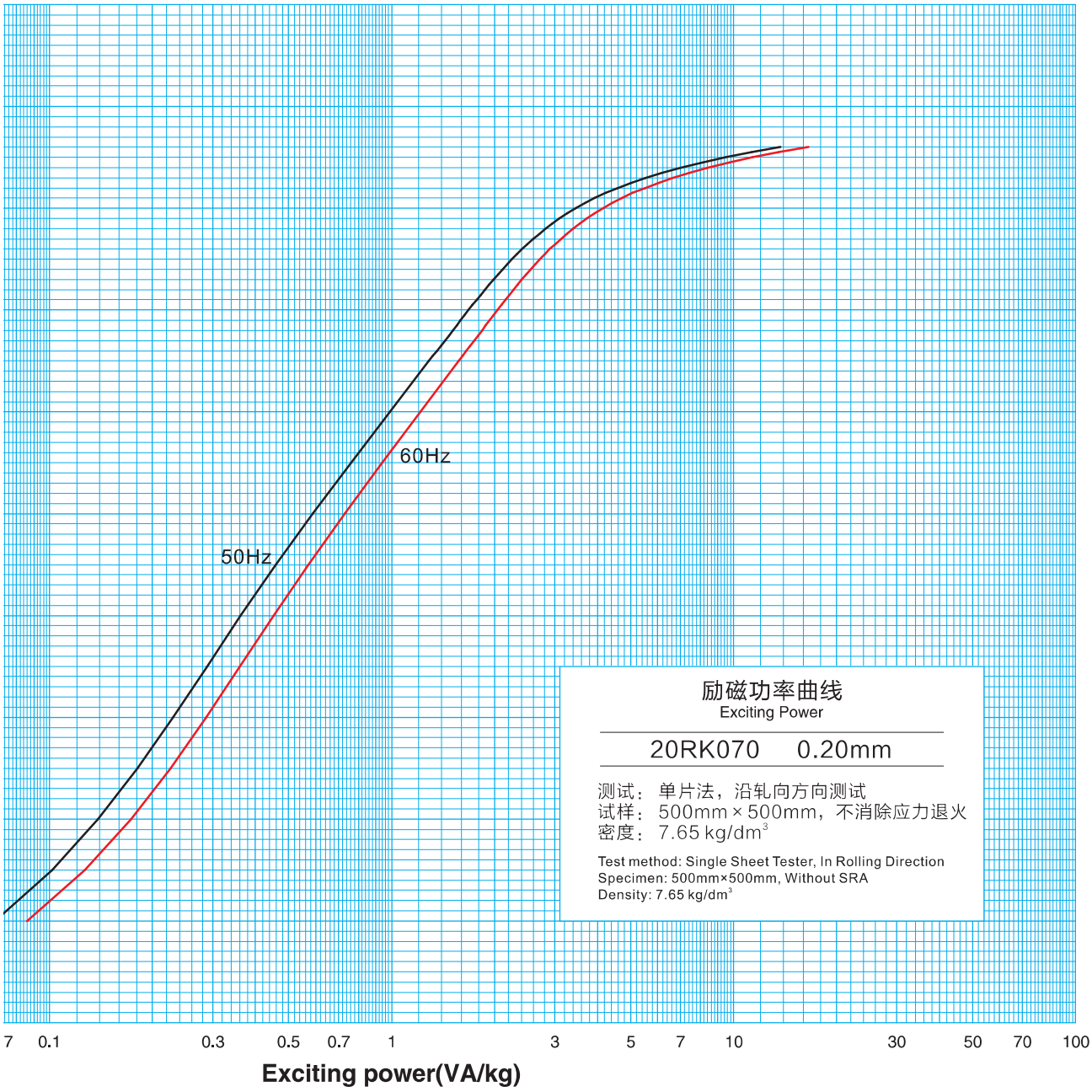
20RK070

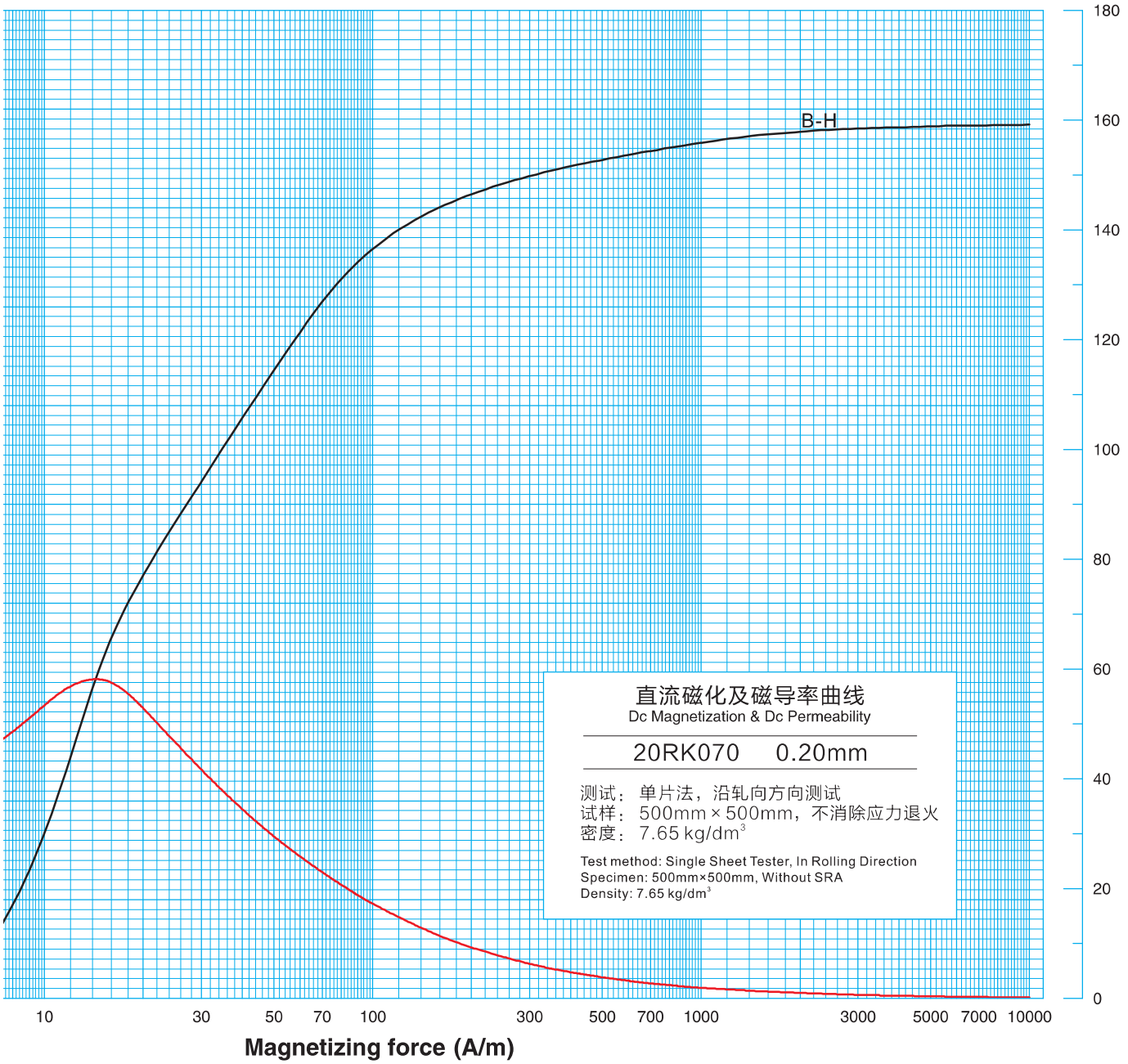
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.036	0.069	0.048	0.086	1.66	0.628	1.988	0.822	2.404
0.50	0.055	0.102	0.073	0.127	1.67	0.638	2.048	0.835	2.473
0.60	0.077	0.139	0.103	0.173	1.68	0.649	2.110	0.849	2.550
0.70	0.104	0.181	0.138	0.226	1.69	0.660	2.178	0.863	2.629
0.80	0.135	0.230	0.179	0.287	1.70	0.672	2.250	0.878	2.716
0.90	0.170	0.289	0.226	0.360	1.71	0.684	2.327	0.893	2.806
1.00	0.211	0.362	0.280	0.452	1.72	0.697	2.409	0.909	2.903
1.10	0.259	0.459	0.342	0.571	1.73	0.710	2.499	0.926	3.008
1.20	0.311	0.589	0.410	0.730	1.74	0.725	2.596	0.944	3.125
1.30	0.368	0.763	0.485	0.940	1.75	0.740	2.704	0.963	3.254
1.40	0.429	0.992	0.565	1.215	1.76	0.756	2.822	0.982	3.392
1.50	0.496	1.288	0.652	1.573	1.77	0.773	2.954	1.004	3.556
1.51	0.503	1.323	0.661	1.613	1.78	0.791	3.100	1.026	3.726
1.52	0.510	1.358	0.670	1.655	1.79	0.810	3.267	1.050	3.924
1.53	0.517	1.395	0.679	1.700	1.80	0.831	3.457	1.076	4.161
1.54	0.524	1.433	0.689	1.744	1.81	0.853	3.674	1.102	4.410
1.55	0.532	1.471	0.699	1.790	1.82	0.877	3.926	1.133	4.728
1.56	0.540	1.510	0.709	1.838	1.83	0.902	4.226	1.163	5.067
1.57	0.547	1.551	0.719	1.885	1.84	0.930	4.577	1.198	5.506
1.58	0.555	1.593	0.729	1.936	1.85	0.960	5.008	1.234	6.017
1.59	0.564	1.636	0.740	1.987	1.86	0.992	5.526	1.275	6.642
1.60	0.572	1.681	0.751	2.040	1.87	1.028	6.181	1.319	7.433
1.61	0.581	1.727	0.762	2.095	1.88	1.068	7.022	1.367	8.419
1.62	0.590	1.775	0.773	2.152	1.89	1.111	8.092	1.420	9.710
1.63	0.599	1.824	0.785	2.211	1.90	1.160	9.499	1.485	11.386
1.64	0.608	1.876	0.797	2.274	1.91	1.222	11.318	1.556	13.590
1.65	0.618	1.930	0.809	2.337	1.92	1.287	13.742	1.637	16.547

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.051	12	0.685	80	1.655	699	1.915	6008	1.966
3	0.051	15	0.886	90	1.690	798	1.922	6996	1.967
4	0.144	18	1.001	99	1.716	898	1.927	7999	1.968
5	0.183	20	1.057	150	1.792	1001	1.932	8954	1.968
6	0.223	30	1.246	200	1.828	1496	1.947	9997	1.969
7	0.323	40	1.375	300	1.865	1993	1.954		
8	0.387	50	1.472	400	1.884	2991	1.961		
9	0.459	60	1.548	501	1.898	3993	1.964		
10	0.534	70	1.609	596	1.907	5035	1.965		


60Hz
50Hz
铁损曲线
Core Loss
20RK070 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

20RK070


60Hz
50Hz
励磁功率曲线
Exciting Power
20RK070 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

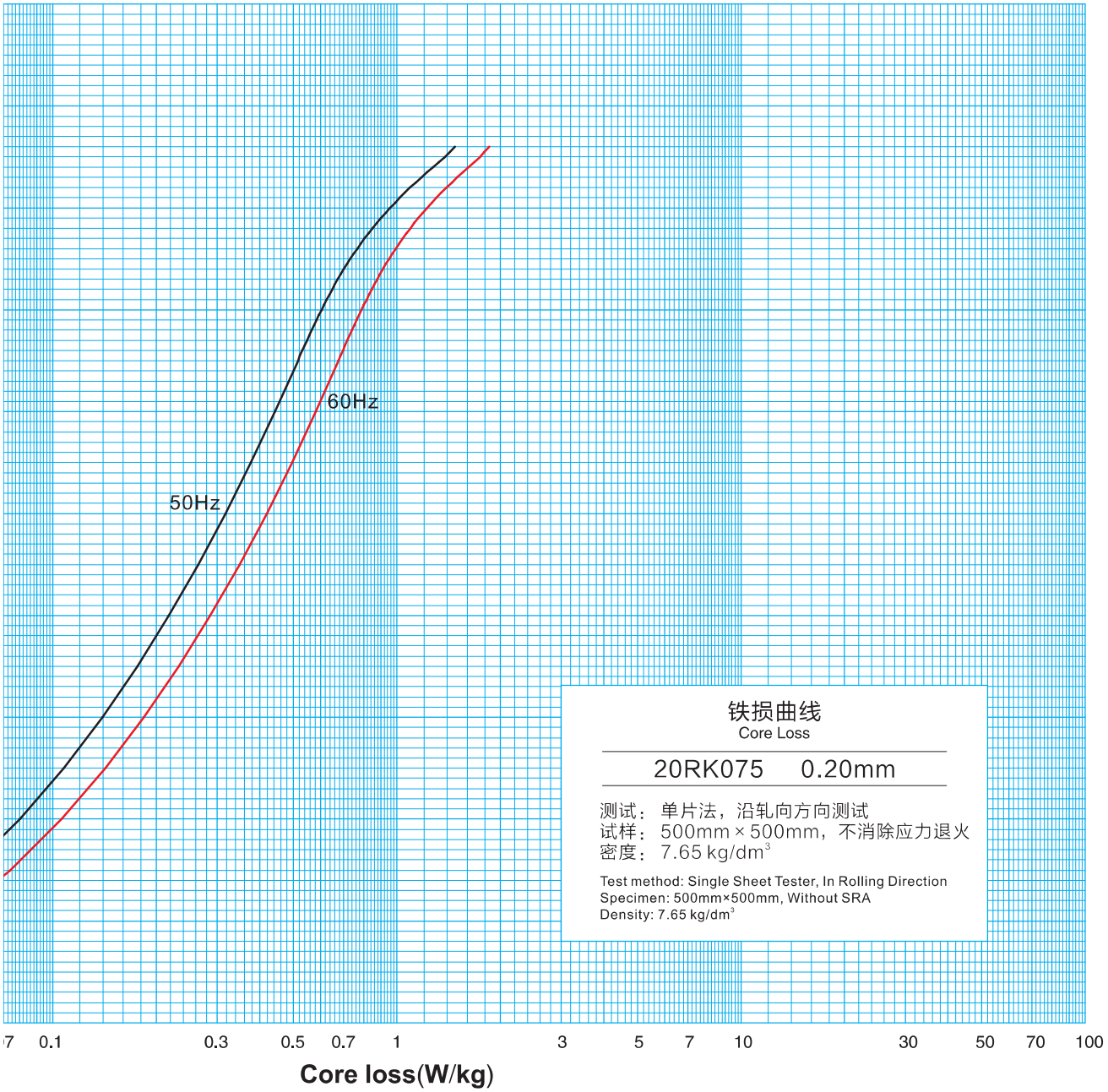

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
20RK070 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

20RK070

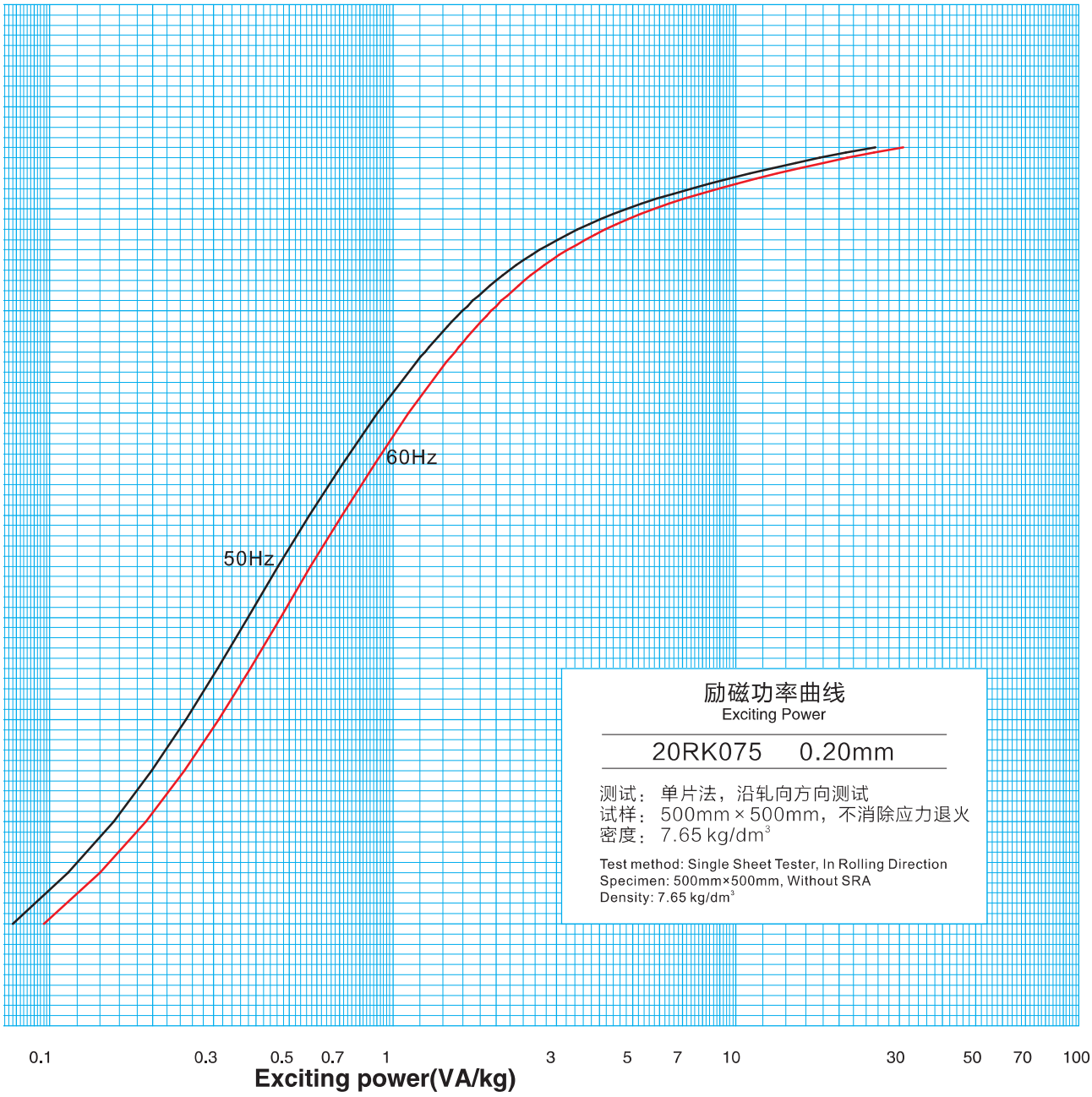
20RK075

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.037	0.078	0.049	0.096	1.66	0.674	2.005	0.877	2.422
0.50	0.057	0.113	0.075	0.140	1.67	0.687	2.092	0.893	2.528
0.60	0.080	0.154	0.106	0.191	1.68	0.702	2.189	0.911	2.644
0.70	0.108	0.198	0.142	0.247	1.69	0.716	2.294	0.929	2.769
0.80	0.139	0.250	0.184	0.311	1.70	0.732	2.412	0.948	2.906
0.90	0.176	0.309	0.232	0.385	1.71	0.749	2.542	0.970	3.065
1.00	0.217	0.378	0.287	0.472	1.72	0.766	2.684	0.992	3.236
1.10	0.265	0.462	0.349	0.577	1.73	0.785	2.847	1.015	3.427
1.20	0.318	0.571	0.419	0.711	1.74	0.805	3.026	1.039	3.643
1.30	0.377	0.713	0.496	0.885	1.75	0.827	3.231	1.065	3.888
1.40	0.442	0.902	0.581	1.112	1.76	0.849	3.465	1.093	4.166
1.50	0.516	1.173	0.676	1.435	1.77	0.873	3.733	1.123	4.489
1.51	0.523	1.206	0.686	1.475	1.78	0.899	4.035	1.154	4.855
1.52	0.532	1.242	0.696	1.517	1.79	0.926	4.400	1.188	5.287
1.53	0.540	1.278	0.707	1.561	1.80	0.955	4.817	1.224	5.789
1.54	0.548	1.317	0.718	1.607	1.81	0.987	5.310	1.263	6.378
1.55	0.557	1.358	0.729	1.655	1.82	1.020	5.883	1.303	7.071
1.56	0.566	1.399	0.740	1.705	1.83	1.055	6.573	1.346	7.899
1.57	0.575	1.444	0.752	1.759	1.84	1.093	7.402	1.393	8.896
1.58	0.584	1.491	0.764	1.815	1.85	1.133	8.396	1.443	10.087
1.59	0.594	1.542	0.777	1.876	1.86	1.180	9.582	1.499	11.503
1.60	0.604	1.595	0.790	1.939	1.87	1.225	11.010	1.555	13.206
1.61	0.615	1.651	0.803	2.005	1.88	1.275	12.791	1.615	15.343
1.62	0.626	1.714	0.816	2.077	1.89	1.325	14.916	1.678	17.950
1.63	0.637	1.778	0.831	2.154	1.90	1.376	17.587	1.740	21.152
1.64	0.649	1.848	0.846	2.238	1.91	1.425	20.949	1.799	25.275
1.65	0.661	1.922	0.861	2.327	1.92	1.471	25.548	1.853	30.777

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.042	22	1.122	90	1.667	901	1.911	5441	1.971
4	0.116	24	1.174	100	1.687	998	1.917	5916	1.972
6	0.209	26	1.219	150	1.753	1500	1.939	6560	1.973
8	0.322	28	1.257	200	1.788	2004	1.951	6952	1.973
10	0.446	30	1.293	300	1.829	2494	1.959	7510	1.974
12	0.590	40	1.424	401	1.854	2989	1.963	8118	1.974
14	0.735	50	1.509	500	1.870	3520	1.966	8499	1.974
16	0.858	60	1.568	600	1.884	4001	1.968	8972	1.975
18	0.975	70	1.610	699	1.894	4454	1.969	9501	1.975
20	1.057	80	1.642	799	1.903	5002	1.971	9903	1.975


60Hz
50Hz
铁损曲线
Core Loss
20RK075 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

20RK075

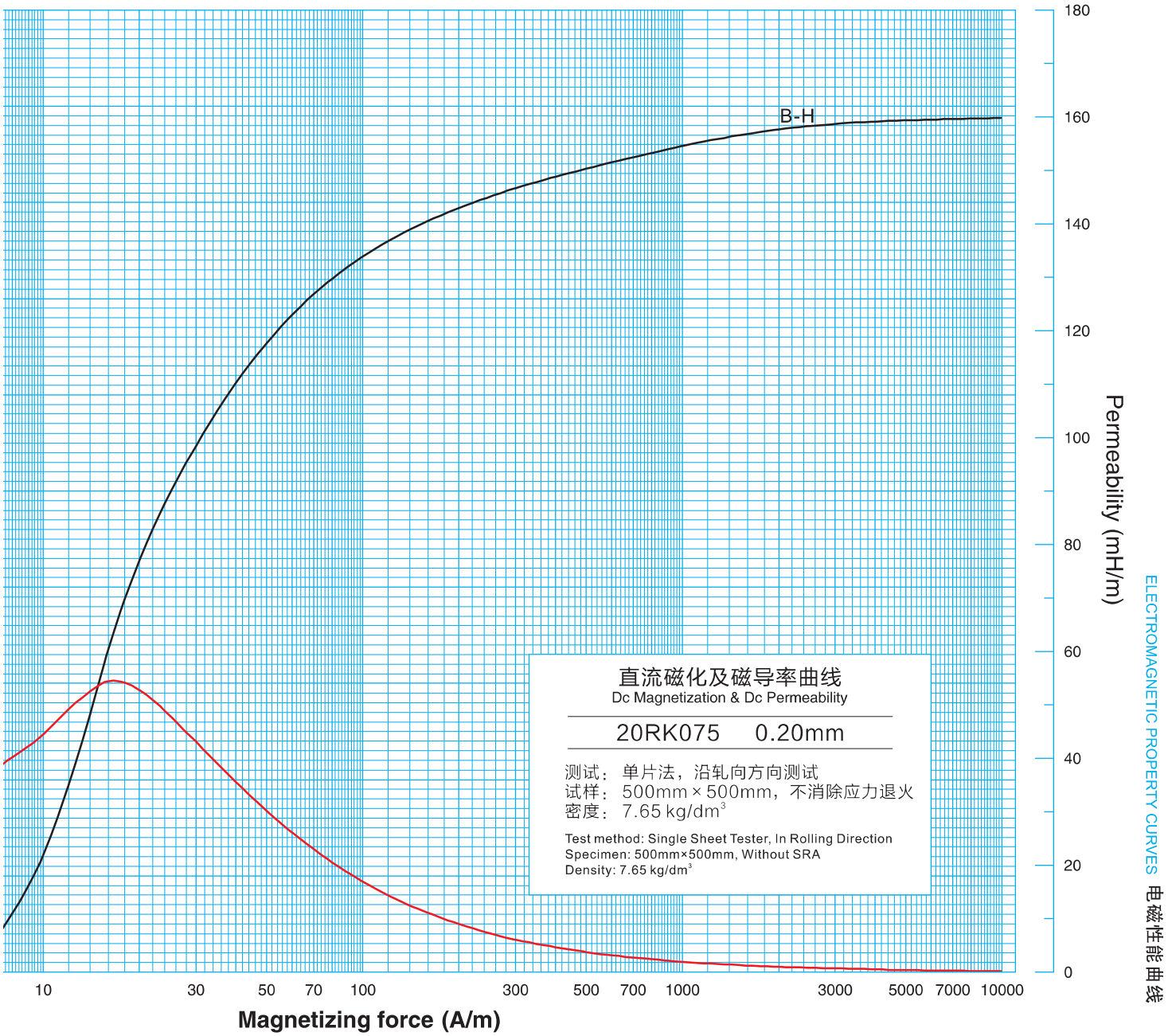


励磁功率曲线
Exciting Power

20RK075　0.20mm

测试：单片法，沿轧向方向测试
试样：500mm × 500mm，不消除应力退火
密度：7.65 kg/dm^3

Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm^3



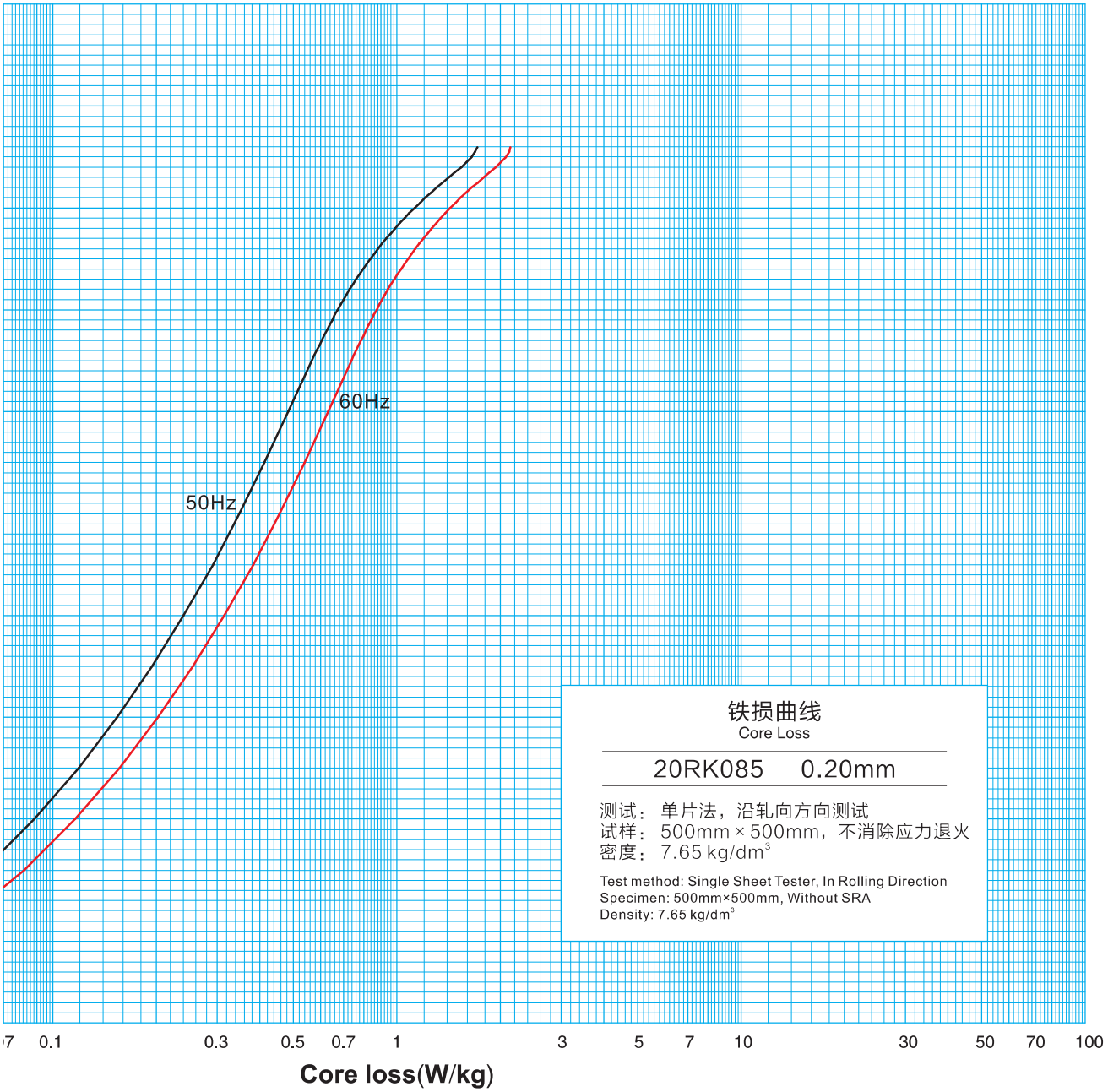
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

20RK075

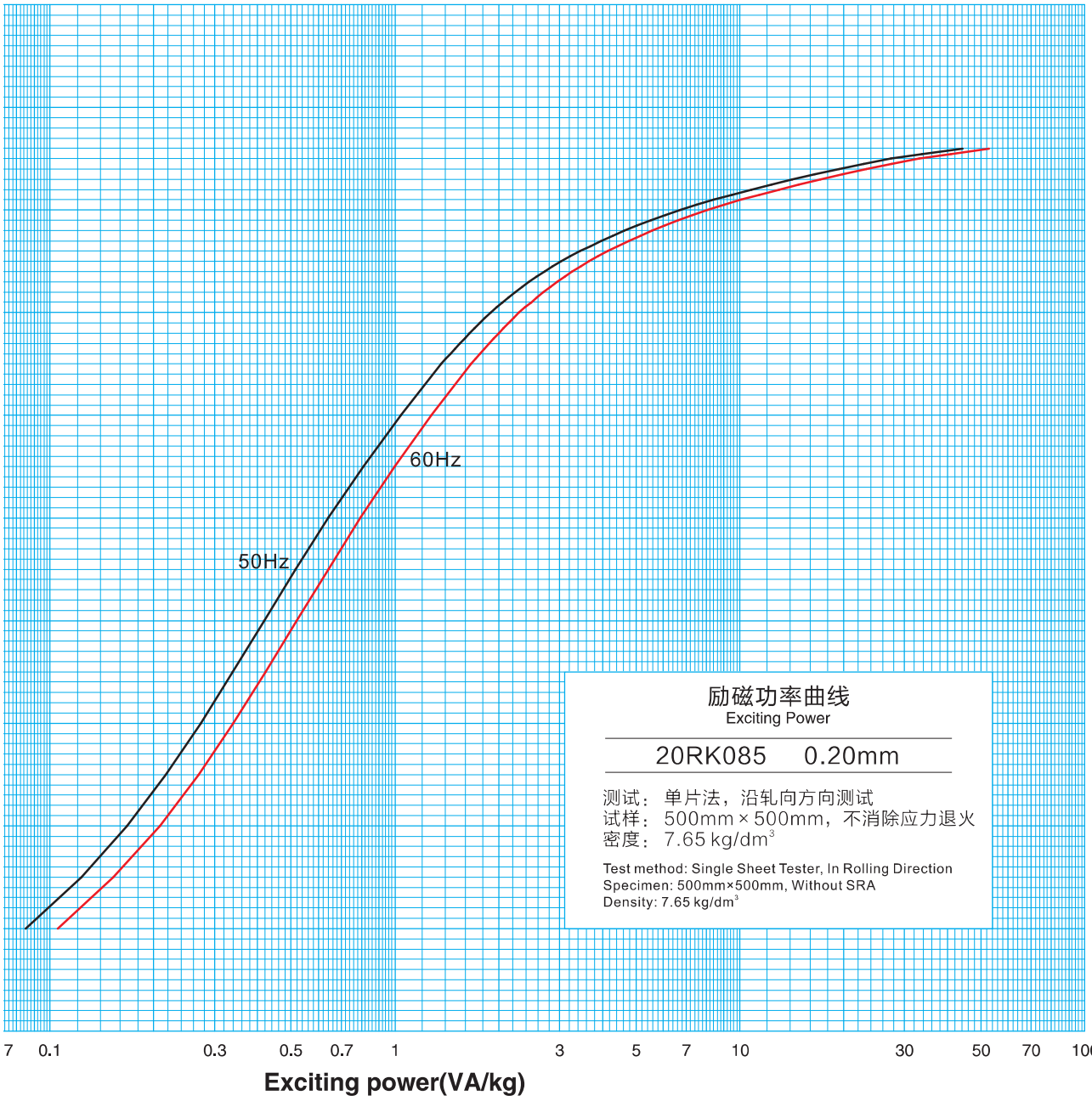
20RK085

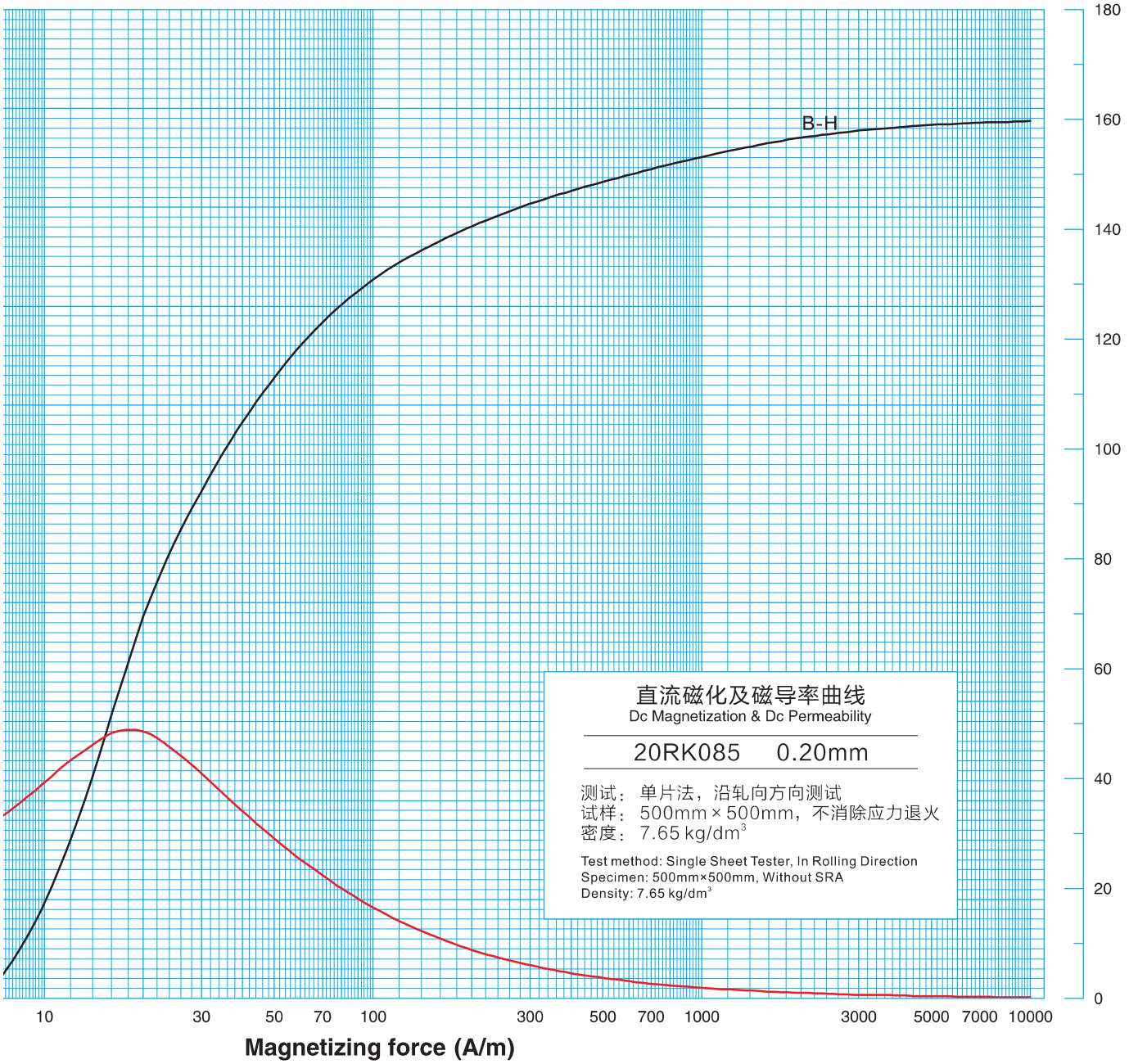
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.041	0.085	0.054	0.105	1.66	0.762	2.450	0.983	2.954
0.50	0.063	0.124	0.082	0.153	1.67	0.779	2.572	1.004	3.101
0.60	0.089	0.168	0.116	0.208	1.68	0.797	2.714	1.028	3.269
0.70	0.119	0.217	0.156	0.270	1.69	0.817	2.869	1.052	3.454
0.80	0.154	0.274	0.202	0.340	1.70	0.837	3.039	1.077	3.656
0.90	0.194	0.339	0.255	0.422	1.71	0.859	3.233	1.104	3.886
1.00	0.240	0.418	0.315	0.520	1.72	0.882	3.447	1.132	4.140
1.10	0.292	0.515	0.382	0.640	1.73	0.907	3.691	1.162	4.434
1.20	0.349	0.642	0.458	0.795	1.74	0.932	3.963	1.194	4.766
1.30	0.413	0.810	0.540	1.000	1.75	0.960	4.282	1.228	5.146
1.40	0.483	1.039	0.632	1.276	1.76	0.989	4.641	1.263	5.571
1.50	0.566	1.366	0.738	1.665	1.77	1.020	5.052	1.301	6.069
1.51	0.575	1.407	0.750	1.714	1.78	1.052	5.530	1.341	6.629
1.52	0.585	1.450	0.762	1.767	1.79	1.087	6.085	1.384	7.301
1.53	0.595	1.496	0.774	1.819	1.80	1.125	6.736	1.430	8.082
1.54	0.605	1.543	0.787	1.877	1.81	1.165	7.502	1.479	9.011
1.55	0.615	1.594	0.800	1.936	1.82	1.208	8.415	1.532	10.095
1.56	0.626	1.647	0.814	2.000	1.83	1.256	9.480	1.589	11.422
1.57	0.637	1.704	0.828	2.067	1.84	1.305	10.793	1.649	12.990
1.58	0.649	1.765	0.843	2.139	1.85	1.359	12.352	1.718	14.845
1.59	0.661	1.828	0.858	2.215	1.86	1.416	14.233	1.788	17.126
1.60	0.673	1.896	0.873	2.294	1.87	1.475	16.530	1.860	19.857
1.61	0.686	1.971	0.890	2.383	1.88	1.536	19.372	1.934	23.252
1.62	0.700	2.051	0.907	2.481	1.89	1.595	22.897	2.006	27.538
1.63	0.714	2.138	0.925	2.584	1.90	1.647	27.462	2.070	33.153
1.64	0.729	2.233	0.943	2.696	1.91	1.688	33.767	2.117	40.920
1.65	0.745	2.333	0.962	2.817	1.92	1.710	44.150	2.137	52.692

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	22	1.042	90	1.631	901	1.895	5410	1.968
4	0.095	24	1.086	100	1.653	998	1.902	5976	1.969
6	0.176	26	1.148	150	1.723	1501	1.926	6430	1.970
8	0.276	28	1.189	200	1.761	1999	1.940	6998	1.971
10	0.393	30	1.226	300	1.807	2498	1.949	7501	1.972
12	0.521	40	1.363	400	1.833	3009	1.955	8003	1.972
14	0.649	50	1.455	499	1.852	3505	1.959	8503	1.973
16	0.773	60	1.520	599	1.866	3984	1.962	9003	1.973
18	0.882	70	1.567	701	1.877	4475	1.964	9473	1.974
20	0.972	80	1.603	800	1.887	4969	1.966	9964	1.974


60Hz
50Hz
铁损曲线
Core Loss
20RK085 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

20RK085


60Hz
50Hz
励磁功率曲线
Exciting Power
20RK085 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

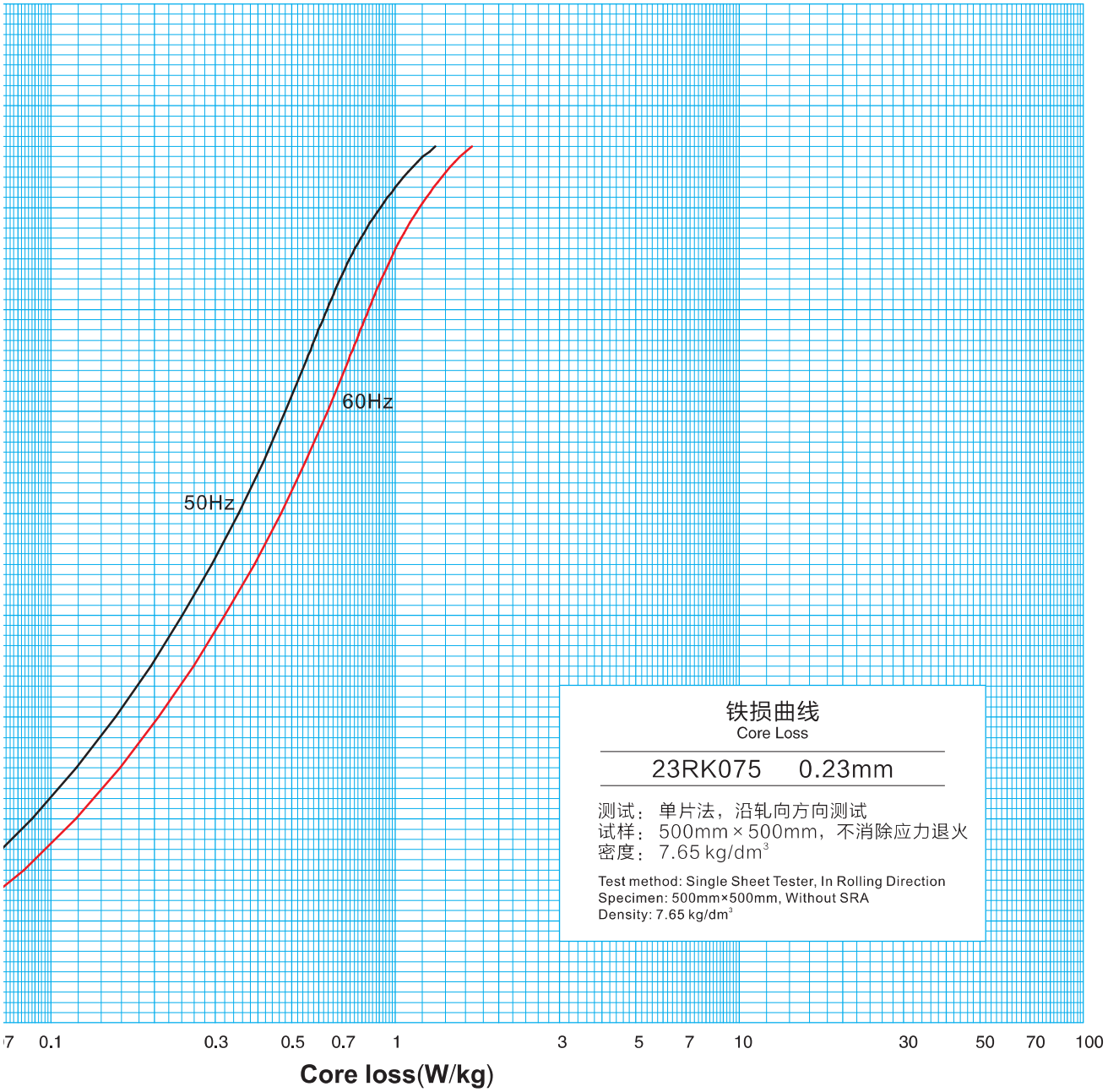

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
20RK085 0.20mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

20RK085

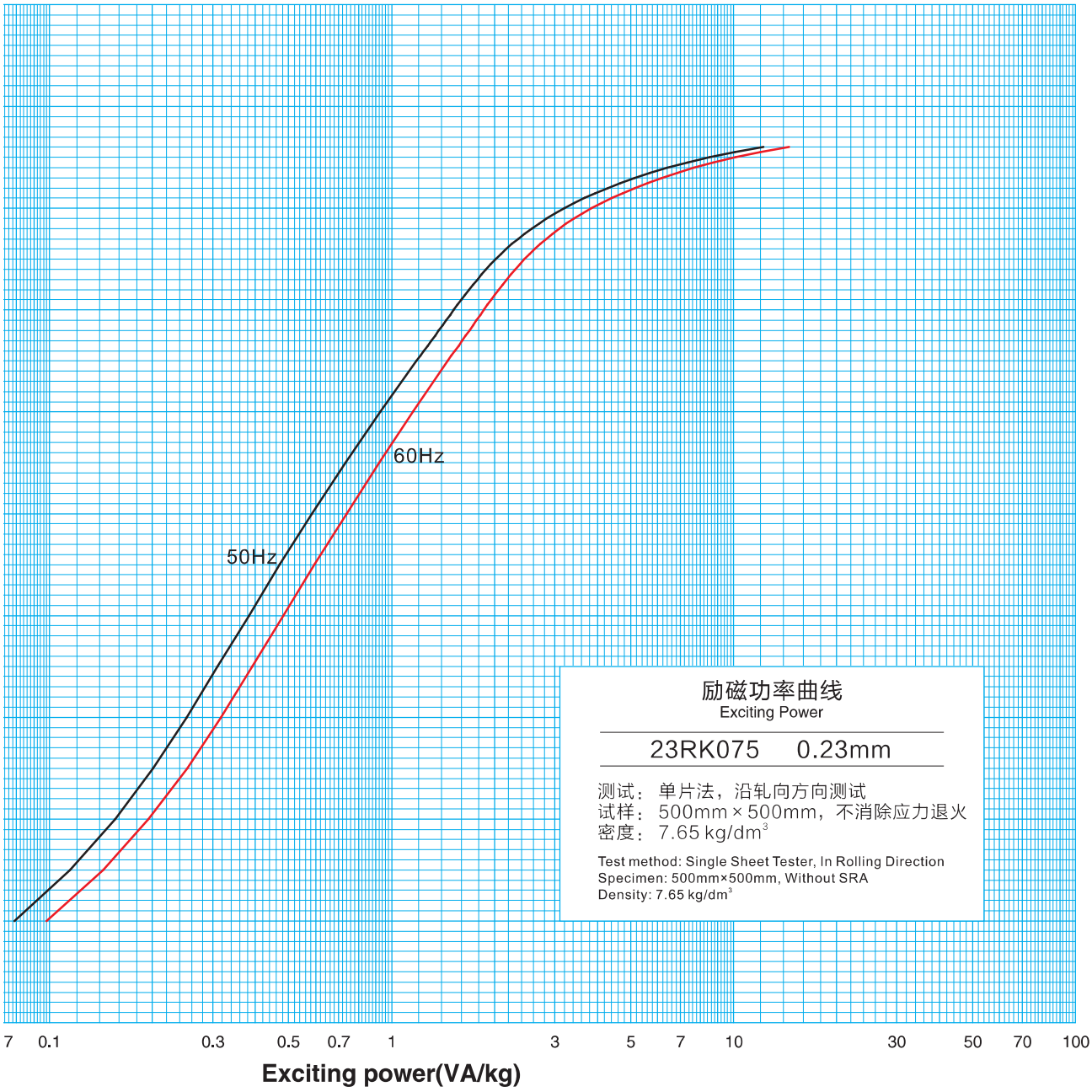
23RK075

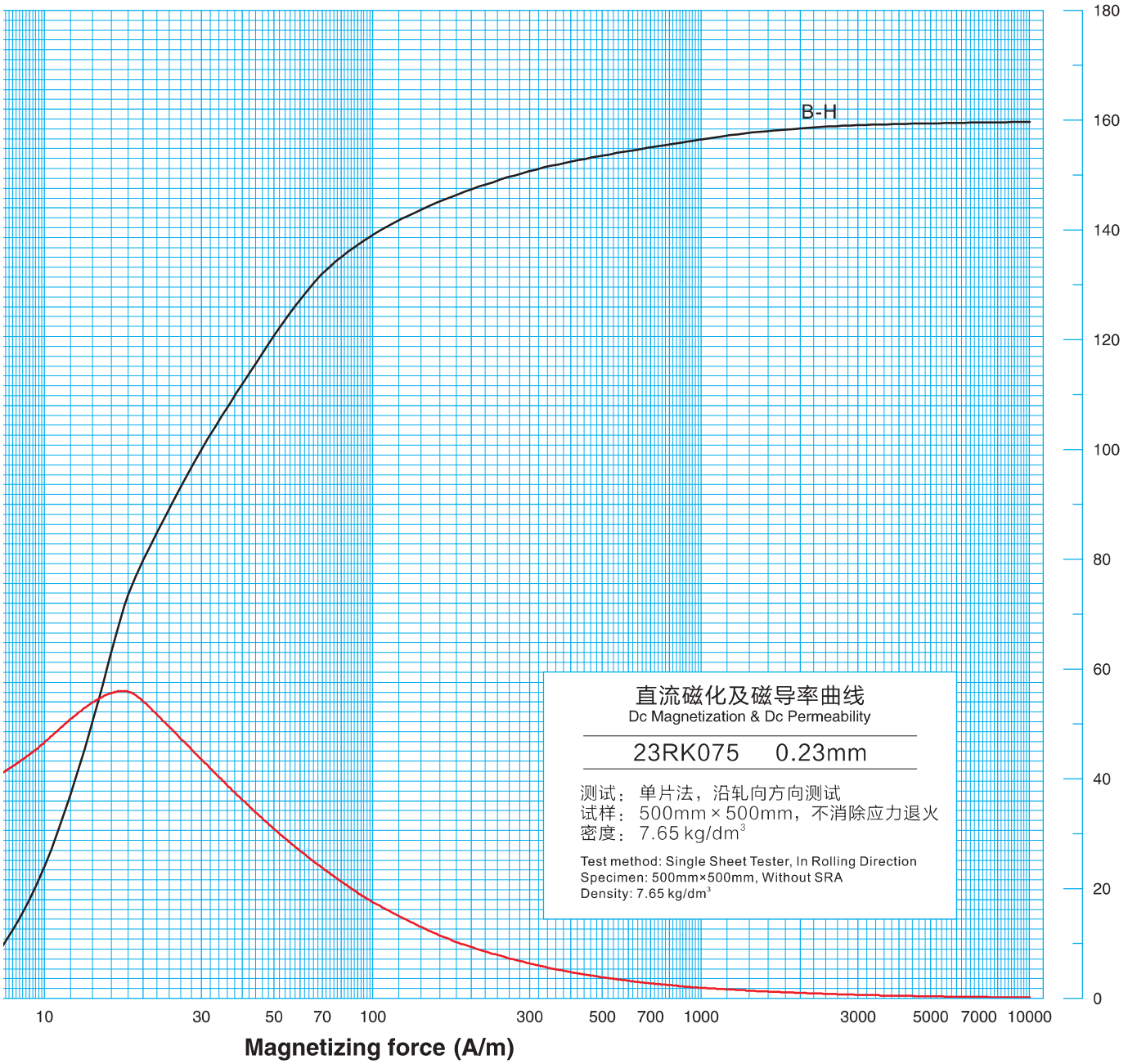
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.041	0.079	0.055	0.098	1.66	0.692	1.784	0.913	2.172
0.50	0.062	0.115	0.083	0.144	1.67	0.703	1.836	0.927	2.233
0.60	0.088	0.155	0.118	0.195	1.68	0.714	1.892	0.941	2.299
0.70	0.119	0.200	0.159	0.253	1.69	0.726	1.952	0.956	2.369
0.80	0.154	0.251	0.206	0.317	1.70	0.738	2.017	0.971	2.444
0.90	0.195	0.310	0.260	0.392	1.71	0.751	2.089	0.987	2.529
1.00	0.241	0.382	0.321	0.482	1.72	0.765	2.166	1.004	2.619
1.10	0.293	0.472	0.389	0.596	1.73	0.779	2.252	1.022	2.720
1.20	0.351	0.585	0.465	0.738	1.74	0.794	2.345	1.041	2.831
1.30	0.413	0.734	0.548	0.919	1.75	0.810	2.451	1.060	2.955
1.40	0.480	0.928	0.636	1.154	1.76	0.827	2.569	1.081	3.093
1.50	0.552	1.183	0.731	1.460	1.77	0.844	2.700	1.103	3.246
1.51	0.559	1.213	0.741	1.496	1.78	0.863	2.845	1.126	3.423
1.52	0.567	1.244	0.751	1.533	1.79	0.883	3.011	1.151	3.620
1.53	0.575	1.275	0.761	1.571	1.80	0.904	3.202	1.176	3.846
1.54	0.583	1.307	0.772	1.609	1.81	0.927	3.419	1.204	4.109
1.55	0.591	1.340	0.782	1.648	1.82	0.950	3.665	1.233	4.405
1.56	0.599	1.374	0.793	1.688	1.83	0.975	3.950	1.263	4.748
1.57	0.607	1.409	0.804	1.730	1.84	1.001	4.288	1.296	5.152
1.58	0.616	1.445	0.815	1.772	1.85	1.029	4.678	1.330	5.625
1.59	0.624	1.481	0.826	1.816	1.86	1.058	5.144	1.367	6.183
1.60	0.633	1.519	0.838	1.860	1.87	1.090	5.713	1.406	6.864
1.61	0.642	1.559	0.849	1.907	1.88	1.124	6.414	1.446	7.637
1.62	0.652	1.600	0.862	1.956	1.89	1.162	7.317	1.494	8.703
1.63	0.661	1.643	0.874	2.007	1.90	1.205	8.526	1.546	10.117
1.64	0.671	1.687	0.886	2.058	1.91	1.257	10.100	1.603	12.005
1.65	0.681	1.733	0.899	2.113	1.92	1.310	12.239	1.671	14.559

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.045	12	0.614	80	1.701	702	1.922	5986	1.972
3	0.082	15	0.834	90	1.726	799	1.929	7002	1.973
4	0.123	18	1.017	99	1.745	899	1.934	7997	1.973
5	0.175	20	1.086	150	1.805	1001	1.939	8998	1.974
6	0.226	30	1.309	199	1.838	1504	1.954	10016	1.975
7	0.280	40	1.443	300	1.874	1994	1.961		
8	0.337	50	1.541	400	1.893	3007	1.968		
9	0.400	60	1.614	500	1.905	3983	1.970		
10	0.466	70	1.666	599	1.915	5002	1.972		


60Hz
50Hz
铁损曲线
Core Loss
23RK075 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23RK075


60Hz
50Hz
励磁功率曲线
Exciting Power
23RK075 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

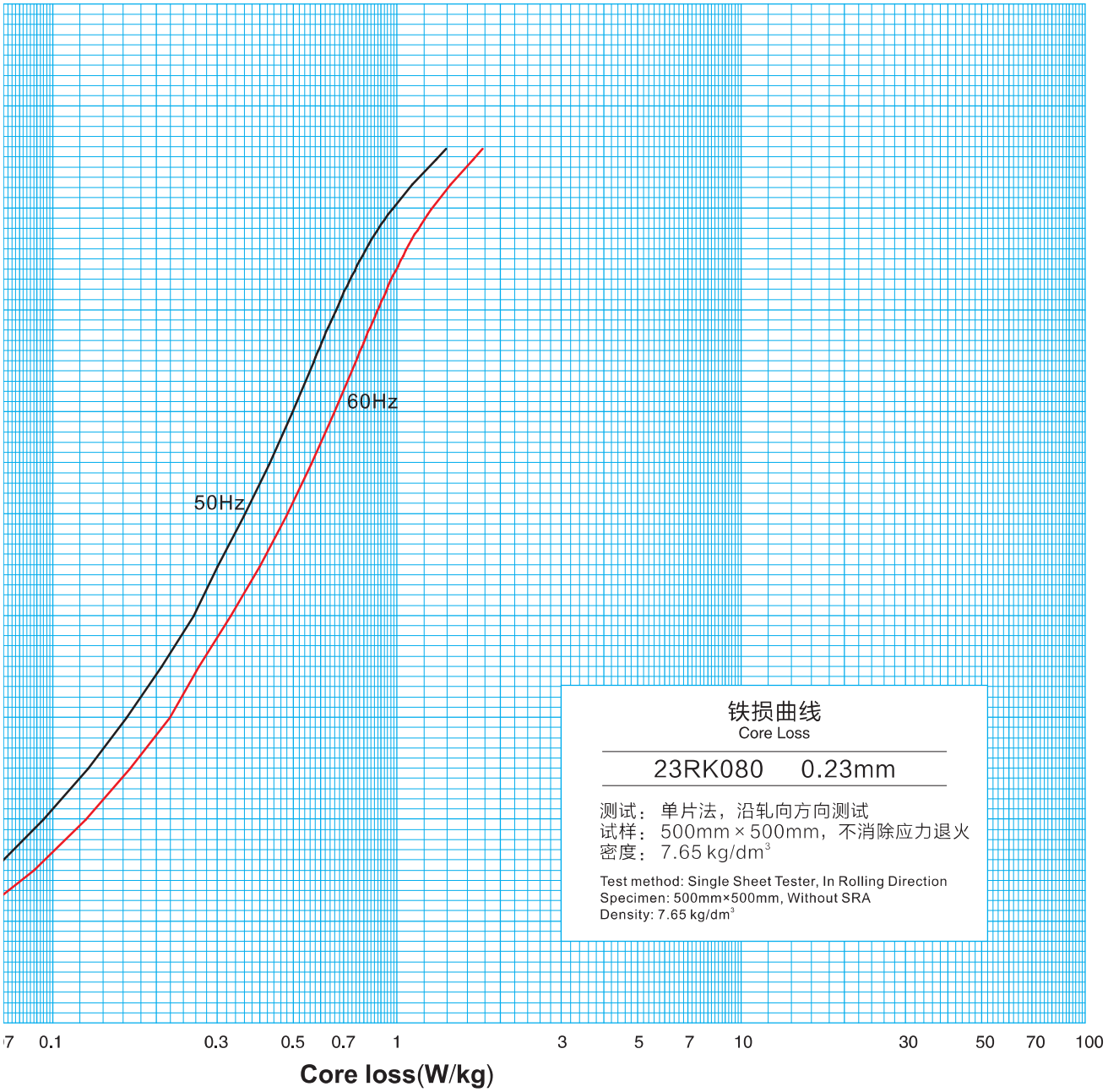

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23RK075 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

23RK075

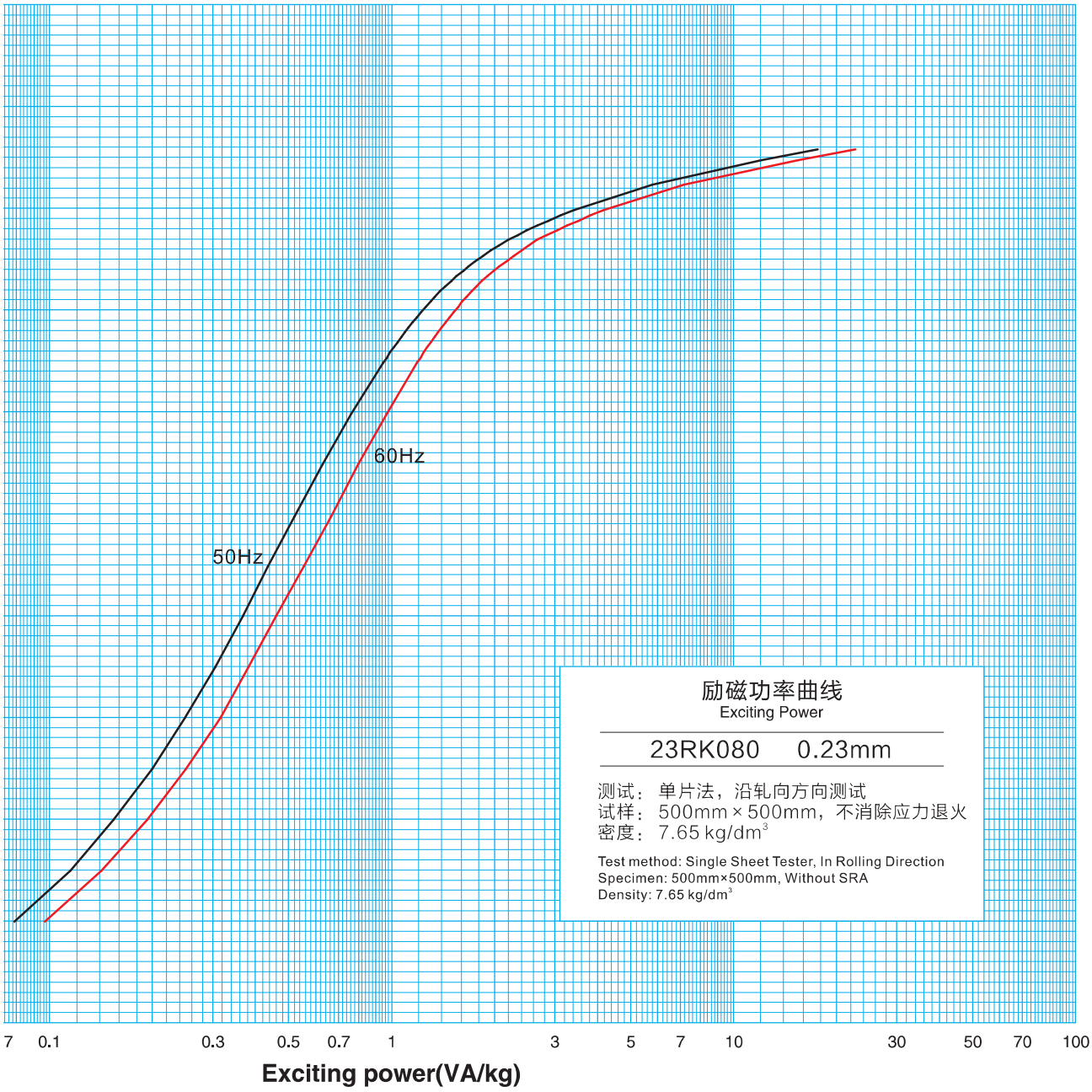
23RK080

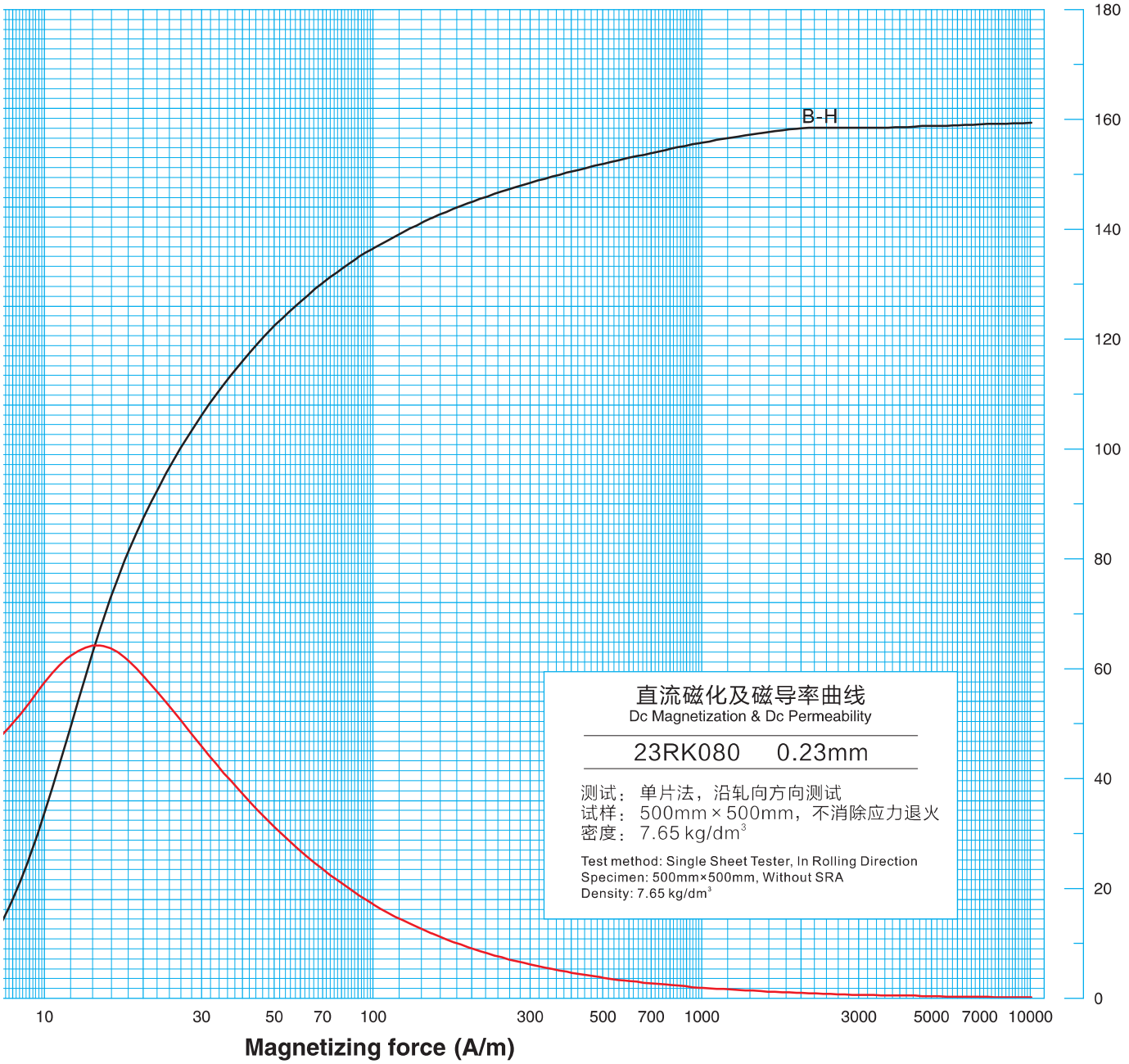
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.044	0.079	0.057	0.097	1.62	0.683	1.301	0.901	1.610
0.50	0.067	0.115	0.088	0.142	1.63	0.693	1.338	0.916	1.662
0.60	0.094	0.154	0.125	0.193	1.64	0.704	1.385	0.930	1.716
0.70	0.127	0.200	0.168	0.251	1.65	0.716	1.434	0.944	1.771
0.80	0.164	0.249	0.219	0.316	1.66	0.729	1.493	0.959	1.835
0.90	0.207	0.305	0.266	0.381	1.67	0.740	1.549	0.974	1.903
1.00	0.256	0.368	0.329	0.461	1.68	0.754	1.618	0.992	1.985
1.10	0.301	0.435	0.399	0.554	1.69	0.765	1.680	1.007	2.062
1.20	0.359	0.520	0.478	0.665	1.70	0.779	1.759	1.026	2.171
1.30	0.425	0.628	0.563	0.798	1.71	0.795	1.849	1.043	2.271
1.40	0.494	0.762	0.656	0.966	1.72	0.811	1.951	1.063	2.396
1.50	0.572	0.945	0.758	1.188	1.73	0.827	2.068	1.083	2.527
1.51	0.580	0.966	0.768	1.216	1.74	0.845	2.200	1.102	2.664
1.52	0.589	0.991	0.780	1.245	1.75	0.863	2.342	1.125	2.843
1.53	0.597	1.016	0.791	1.273	1.76	0.878	2.477	1.149	3.044
1.54	0.605	1.040	0.802	1.303	1.77	0.900	2.675	1.174	3.271
1.55	0.615	1.069	0.813	1.335	1.78	0.920	2.874	1.200	3.523
1.56	0.623	1.096	0.825	1.369	1.79	0.943	3.130	1.228	3.823
1.57	0.631	1.120	0.837	1.402	1.80	0.967	3.420	1.258	4.179
1.58	0.642	1.153	0.850	1.439	1.85	1.109	5.794	1.434	7.155
1.59	0.652	1.185	0.863	1.480	1.90	1.296	12.072	1.667	15.492
1.60	0.662	1.220	0.875	1.521	1.91	1.360	15.964	1.742	20.569
1.61	0.672	1.258	0.888	1.564	1.92	1.387	17.632	1.774	22.745

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.042	10	0.578	60	1.610	402	1.872	3016	1.961
3	0.084	12	0.752	70	1.647	502	1.888	4022	1.962
4	0.134	15	0.967	80	1.676	602	1.901	5019	1.964
5	0.191	18	1.108	90	1.699	703	1.910	6024	1.965
6	0.255	20	1.176	100	1.717	803	1.918	7028	1.968
7	0.326	30	1.381	151	1.778	1004	1.930	8032	1.968
8	0.403	40	1.491	201	1.812	1508	1.950	9036	1.969
9	0.488	50	1.561	302	1.850	2010	1.959	10041	1.971


60Hz
50Hz
铁损曲线
Core Loss
23RK080 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23RK080


60Hz
50Hz
励磁功率曲线
Exciting Power
23RK080 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

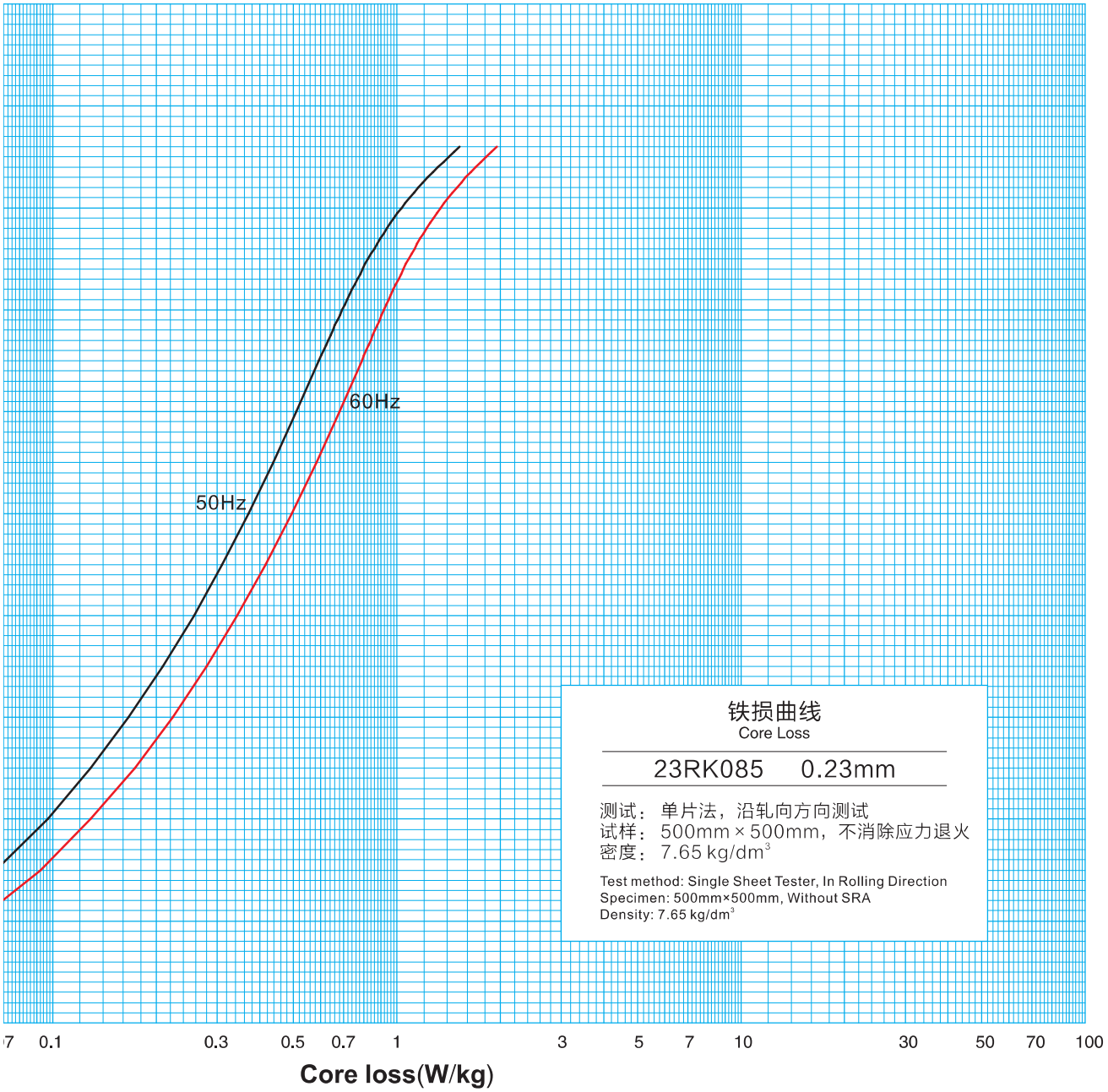

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23RK080 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

23RK080

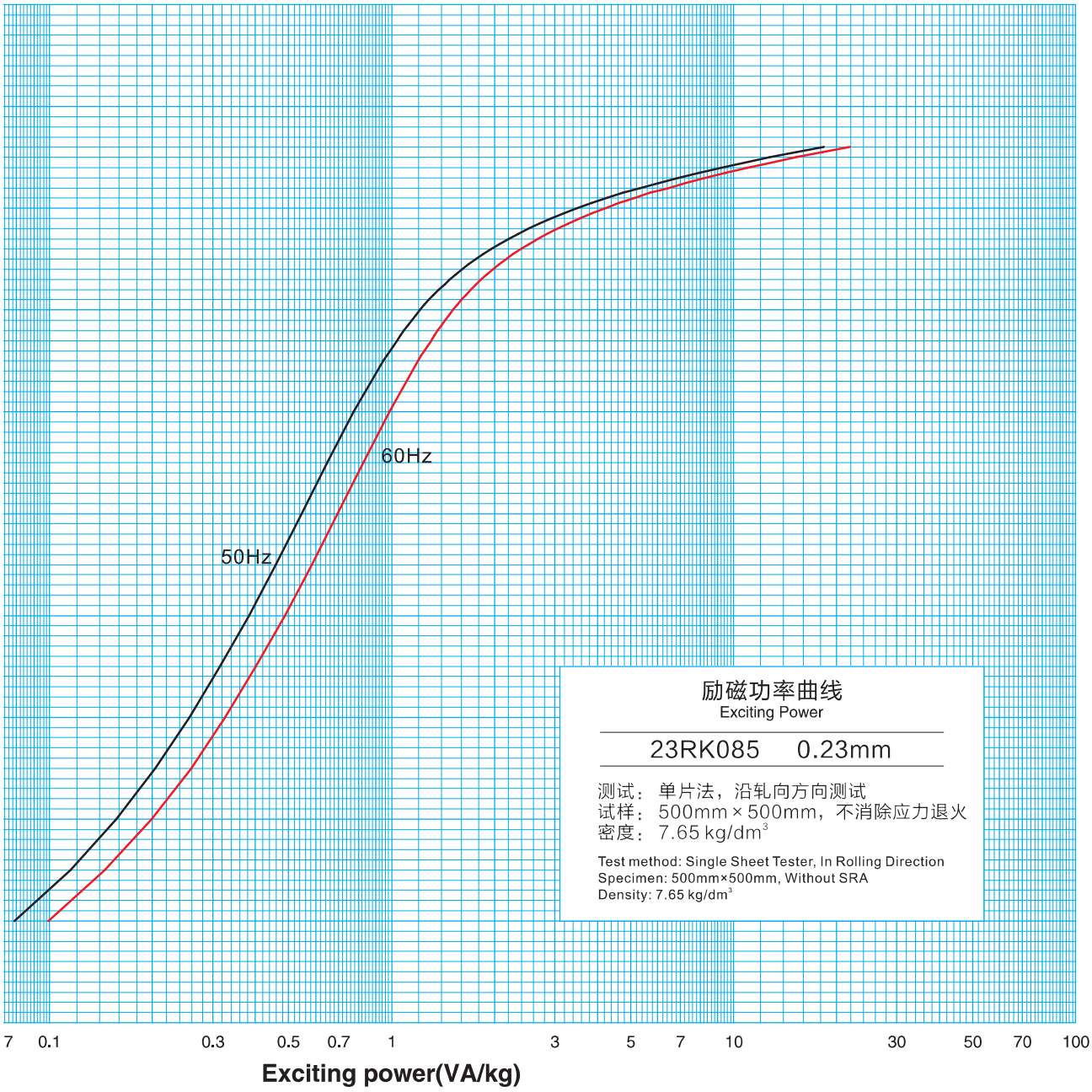
23RK085

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.045	0.079	0.060	0.099	1.66	0.767	1.479	1.010	1.827
0.50	0.068	0.115	0.092	0.145	1.67	0.781	1.540	1.028	1.900
0.60	0.097	0.157	0.129	0.199	1.68	0.795	1.606	1.045	1.979
0.70	0.129	0.204	0.173	0.259	1.69	0.809	1.679	1.063	2.066
0.80	0.166	0.257	0.223	0.326	1.70	0.825	1.761	1.083	2.162
0.90	0.209	0.315	0.280	0.401	1.71	0.841	1.852	1.102	2.264
1.00	0.257	0.383	0.344	0.487	1.72	0.859	1.954	1.125	2.391
1.10	0.310	0.458	0.415	0.584	1.73	0.876	2.068	1.146	2.521
1.20	0.370	0.546	0.495	0.695	1.74	0.895	2.198	1.169	2.673
1.30	0.437	0.649	0.583	0.826	1.75	0.915	2.345	1.194	2.848
1.40	0.510	0.775	0.681	0.986	1.76	0.936	2.514	1.221	3.054
1.50	0.594	0.945	0.791	1.194	1.77	0.958	2.708	1.248	3.285
1.51	0.603	0.966	0.802	1.220	1.78	0.981	2.929	1.278	3.554
1.52	0.612	0.989	0.814	1.247	1.79	1.005	3.187	1.308	3.847
1.53	0.622	1.012	0.827	1.276	1.80	1.031	3.488	1.342	4.224
1.54	0.631	1.036	0.839	1.305	1.81	1.059	3.837	1.375	4.619
1.55	0.641	1.061	0.851	1.333	1.82	1.089	4.253	1.413	5.135
1.56	0.651	1.088	0.864	1.365	1.83	1.121	4.741	1.449	5.692
1.57	0.661	1.115	0.877	1.399	1.84	1.155	5.330	1.495	6.443
1.58	0.672	1.146	0.891	1.435	1.85	1.192	6.038	1.537	7.243
1.59	0.683	1.178	0.903	1.471	1.86	1.230	6.893	1.584	8.261
1.60	0.693	1.211	0.918	1.511	1.87	1.272	7.954	1.641	9.470
1.61	0.705	1.247	0.933	1.557	1.88	1.316	9.250	1.695	11.011
1.62	0.716	1.287	0.947	1.600	1.89	1.366	10.803	1.751	12.930
1.63	0.728	1.329	0.961	1.650	1.90	1.417	12.776	1.816	15.223
1.64	0.741	1.375	0.977	1.704	1.91	1.470	15.260	1.883	18.229
1.65	0.754	1.426	0.994	1.766	1.92	1.521	18.411	1.949	21.828

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.037	12	0.714	80	1.692	703	1.906	7027	1.972
3	0.073	15	0.962	90	1.711	803	1.914	8032	1.974
4	0.115	18	1.136	100	1.726	1004	1.928	9036	1.974
5	0.162	20	1.216	151	1.778	1507	1.950	10040	1.975
6	0.217	30	1.441	201	1.808	2010	1.962		
7	0.280	40	1.541	302	1.845	3016	1.967		
8	0.350	50	1.599	402	1.867	4021	1.968		
9	0.433	60	1.638	502	1.883	5019	1.970		
10	0.526	70	1.669	602	1.896	6023	1.972		


60Hz
50Hz
铁损曲线
Core Loss
23RK085 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23RK085

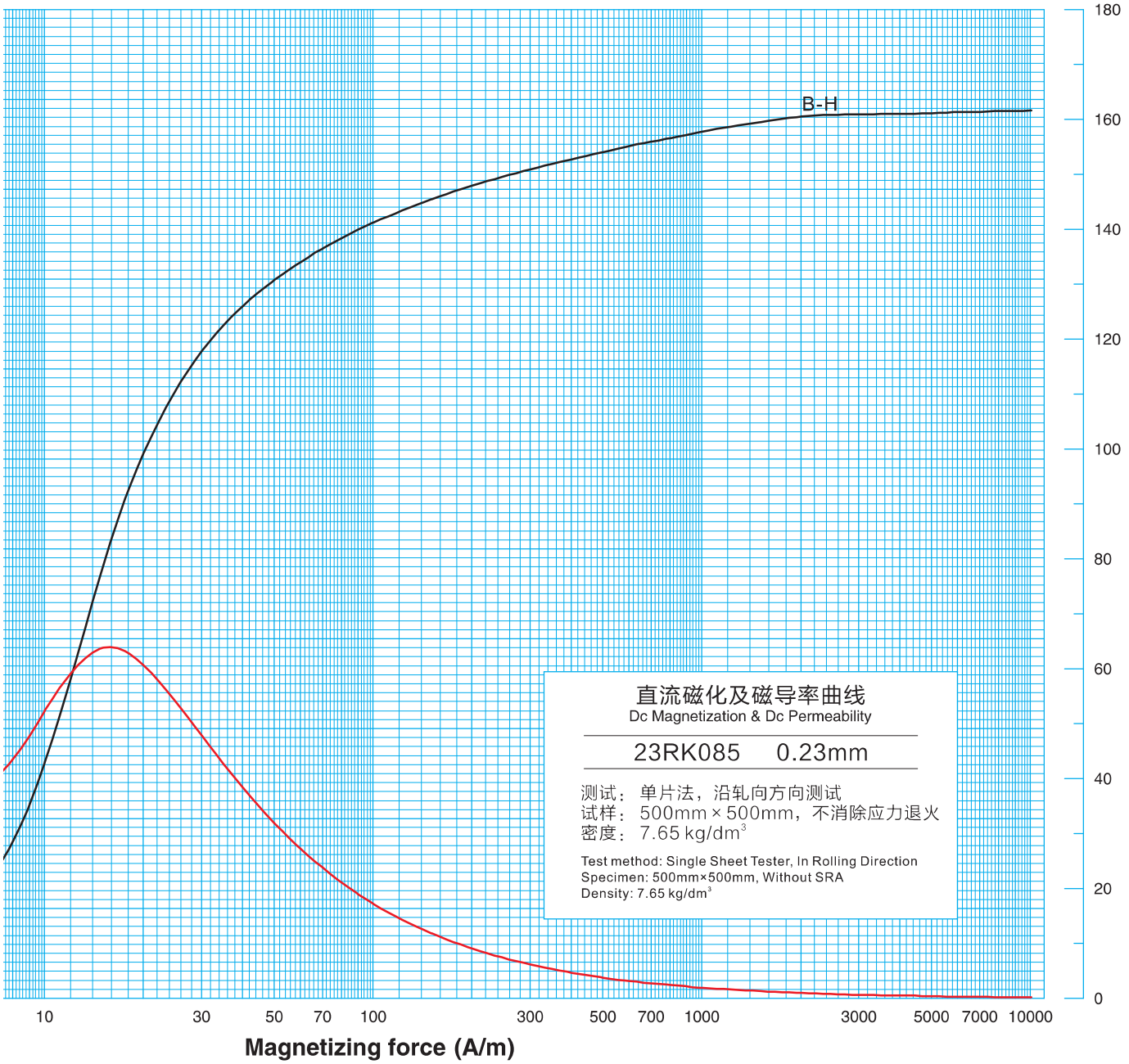


励磁功率曲线
Exciting Power

23RK085　0.23mm

测试：单片法，沿轧向方向测试
试样：500mm × 500mm，不消除应力退火
密度：7.65 kg/dm^3

Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm^3

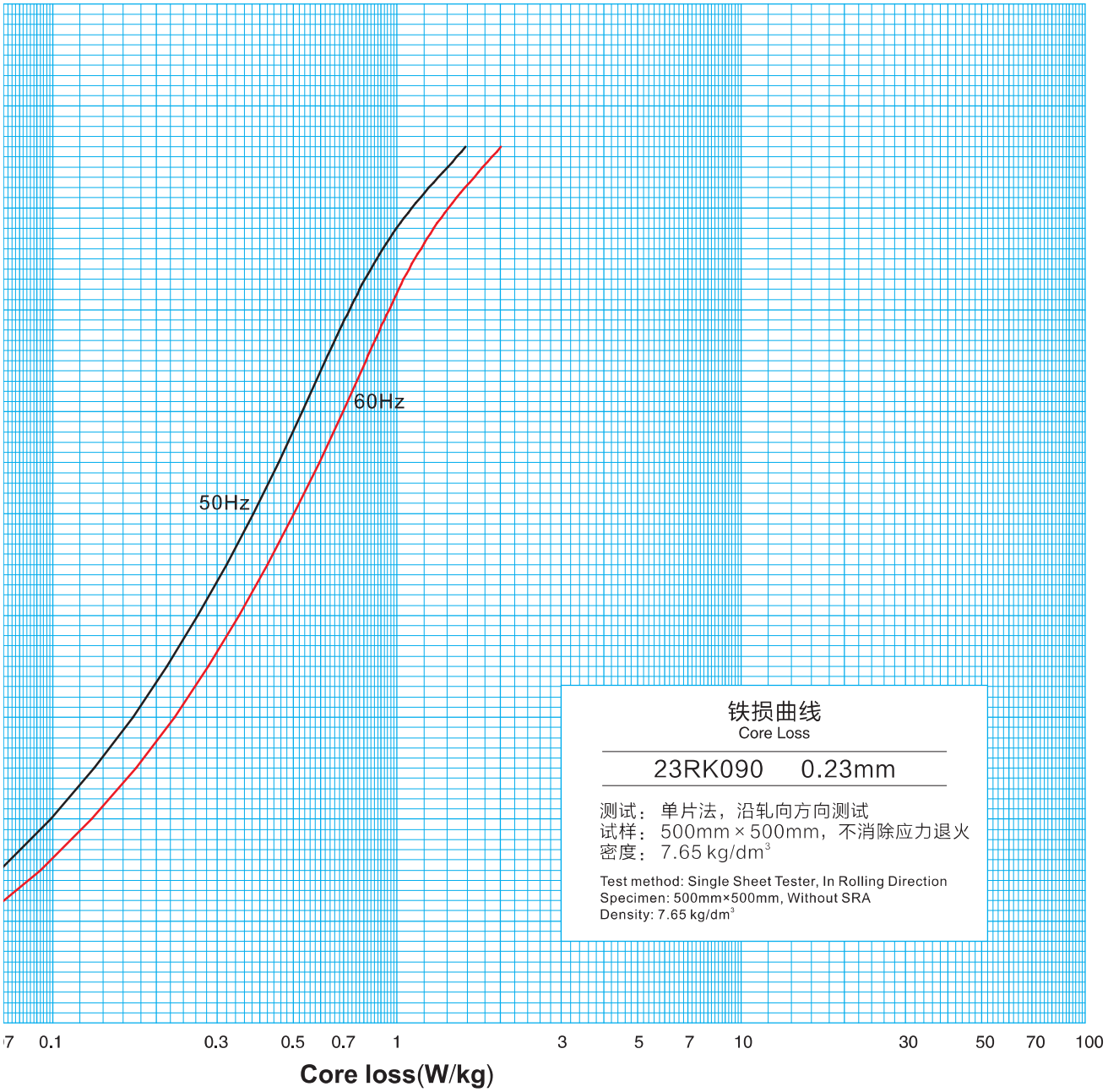

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
23RK085 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

23RK085

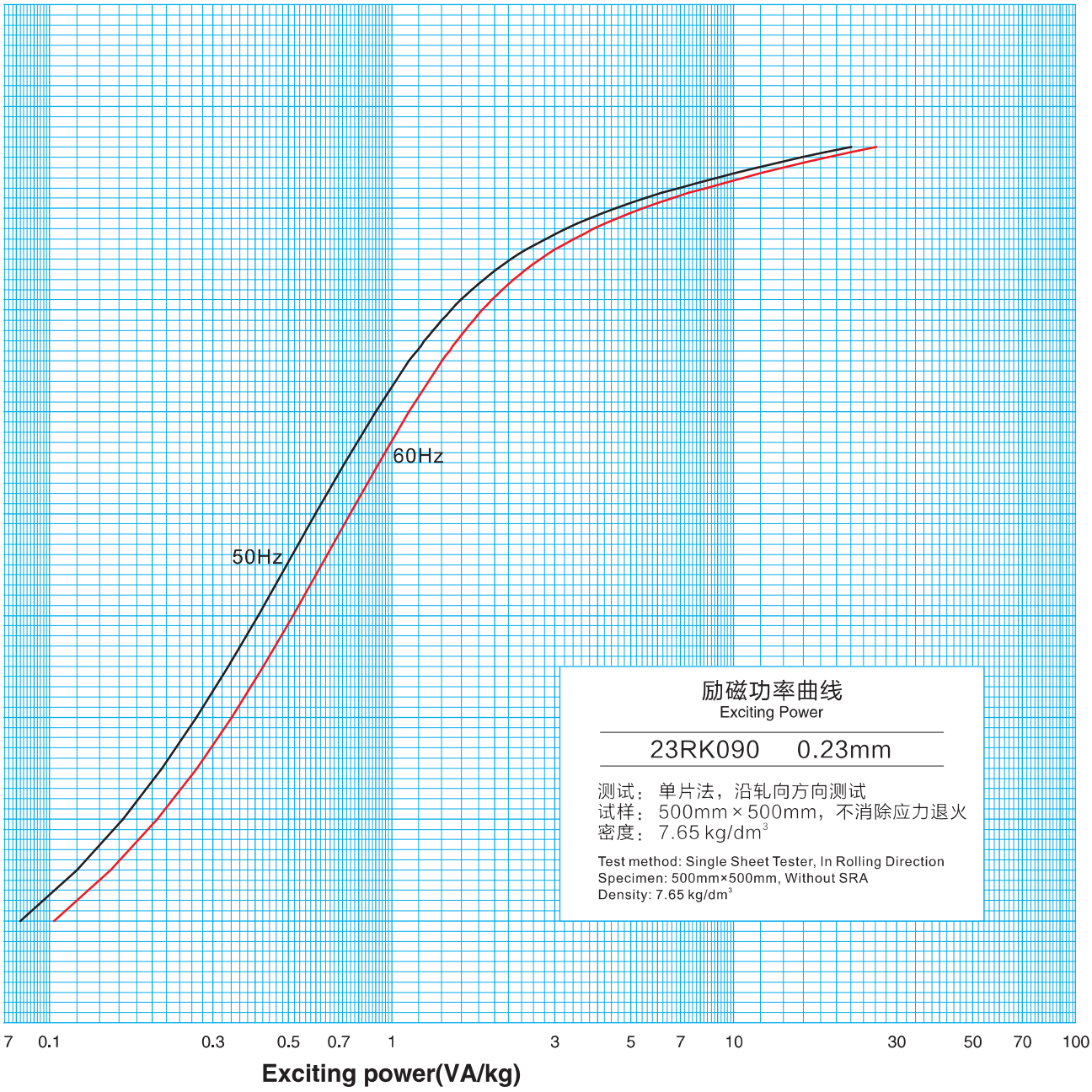
23RK090

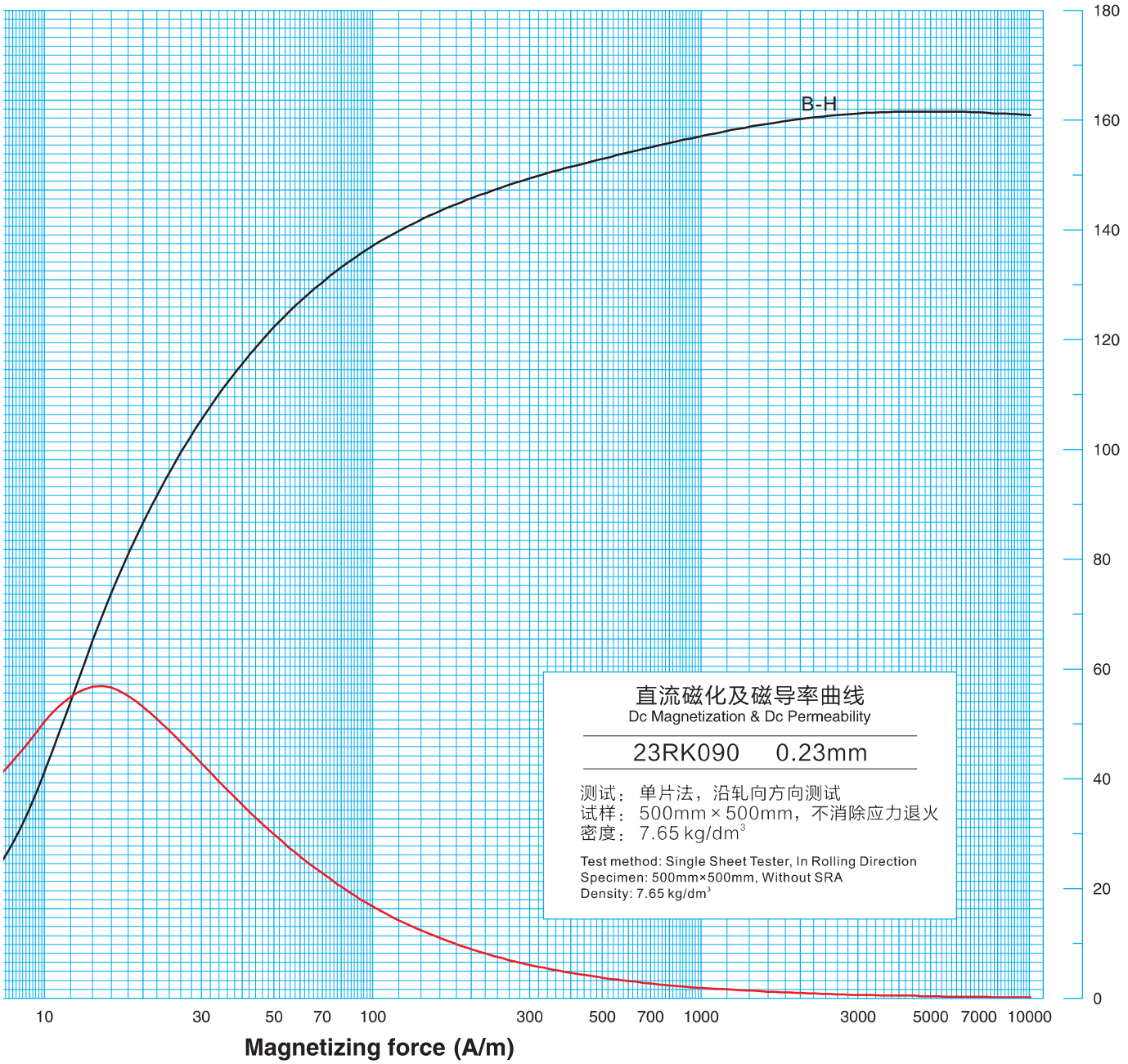
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.046	0.082	0.061	0.103	1.66	0.808	1.859	1.046	2.272
0.50	0.070	0.120	0.092	0.151	1.67	0.823	1.939	1.065	2.369
0.60	0.099	0.164	0.130	0.207	1.68	0.839	2.029	1.085	2.474
0.70	0.132	0.213	0.175	0.270	1.69	0.856	2.128	1.106	2.593
0.80	0.171	0.269	0.226	0.341	1.70	0.873	2.235	1.128	2.721
0.90	0.215	0.333	0.283	0.421	1.71	0.891	2.357	1.150	2.860
1.00	0.264	0.407	0.348	0.515	1.72	0.910	2.492	1.174	3.026
1.10	0.320	0.494	0.421	0.625	1.73	0.931	2.646	1.198	3.201
1.20	0.383	0.599	0.503	0.757	1.74	0.952	2.818	1.225	3.408
1.30	0.453	0.730	0.595	0.919	1.75	0.974	3.014	1.253	3.645
1.40	0.532	0.898	0.698	1.126	1.76	0.997	3.235	1.280	3.902
1.50	0.620	1.126	0.813	1.405	1.77	1.022	3.492	1.311	4.208
1.51	0.630	1.155	0.824	1.439	1.78	1.049	3.788	1.344	4.566
1.52	0.640	1.186	0.837	1.476	1.79	1.076	4.127	1.377	4.971
1.53	0.650	1.217	0.850	1.514	1.80	1.106	4.524	1.413	5.440
1.54	0.660	1.250	0.863	1.555	1.81	1.137	4.982	1.452	6.002
1.55	0.671	1.286	0.877	1.596	1.82	1.170	5.526	1.491	6.654
1.56	0.682	1.323	0.891	1.641	1.83	1.204	6.170	1.533	7.397
1.57	0.693	1.362	0.904	1.685	1.84	1.239	6.923	1.577	8.312
1.58	0.704	1.402	0.919	1.735	1.85	1.278	7.823	1.625	9.421
1.59	0.716	1.447	0.933	1.786	1.86	1.317	8.914	1.677	10.674
1.60	0.728	1.493	0.948	1.842	1.87	1.360	10.177	1.724	12.067
1.61	0.740	1.543	0.964	1.903	1.88	1.404	11.713	1.777	13.912
1.62	0.753	1.597	0.979	1.964	1.89	1.450	13.590	1.833	16.100
1.63	0.766	1.655	0.996	2.033	1.90	1.494	15.846	1.892	18.874
1.64	0.780	1.717	1.013	2.109	1.91	1.540	18.616	1.949	22.132
1.65	0.793	1.785	1.030	2.186	1.92	1.585	22.081	2.004	26.213

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	12	0.663	80	1.628	703	1.896	7028	1.972
3	0.068	15	0.858	90	1.655	803	1.905	8032	1.970
4	0.111	18	0.994	100	1.676	1004	1.920	9037	1.969
5	0.159	20	1.064	151	1.745	1508	1.944	10041	1.967
6	0.216	30	1.290	201	1.783	2010	1.957		
7	0.279	40	1.415	302	1.826	3016	1.970		
8	0.348	50	1.496	402	1.852	4022	1.974		
9	0.425	60	1.553	502	1.869	5020	1.975		
10	0.507	70	1.595	602	1.884	6023	1.974		


60Hz
50Hz
铁损曲线
Core Loss
23RK090 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23RK090


60Hz
50Hz
励磁功率曲线
Exciting Power
23RK090 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)



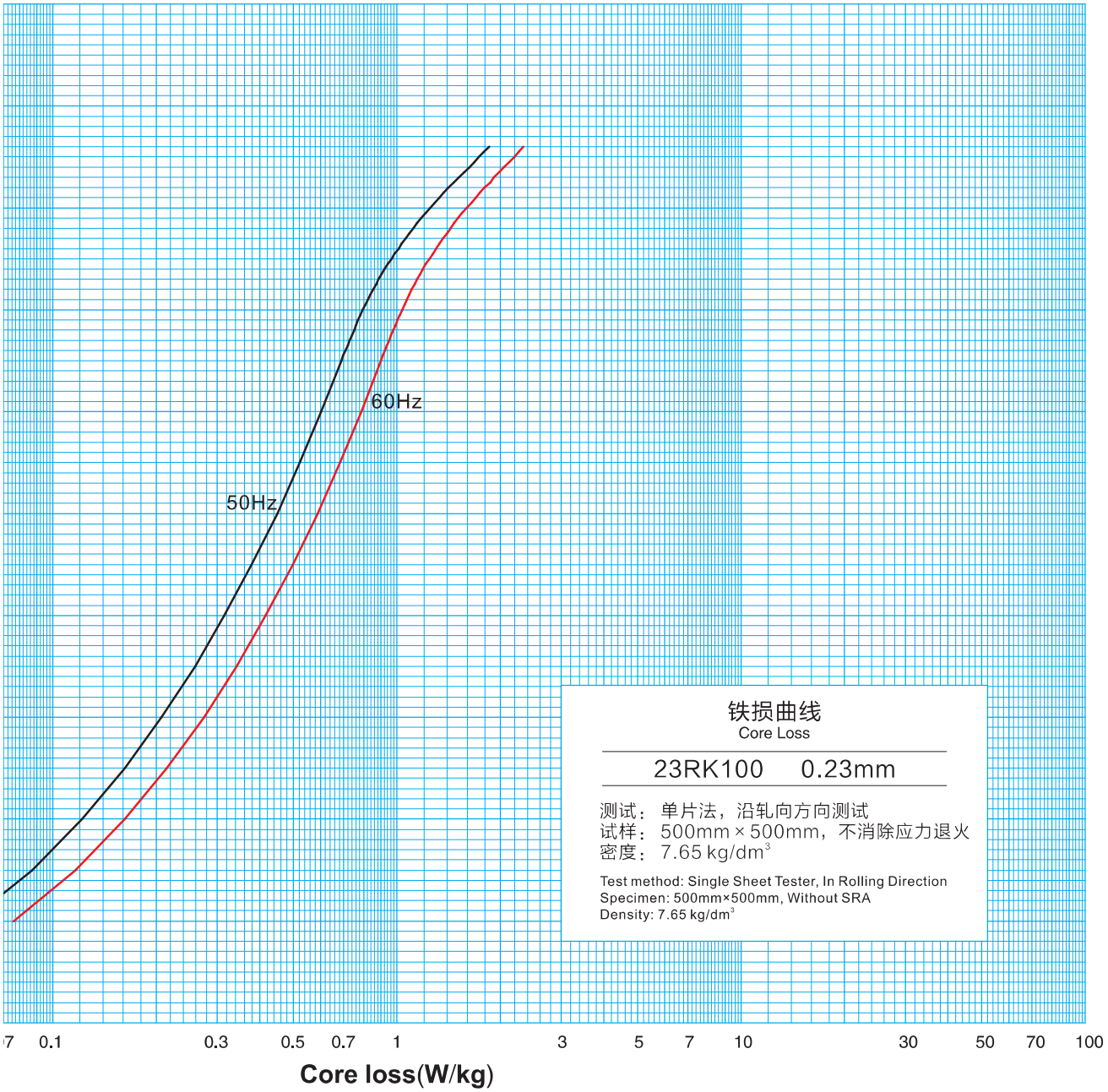
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

23RK090

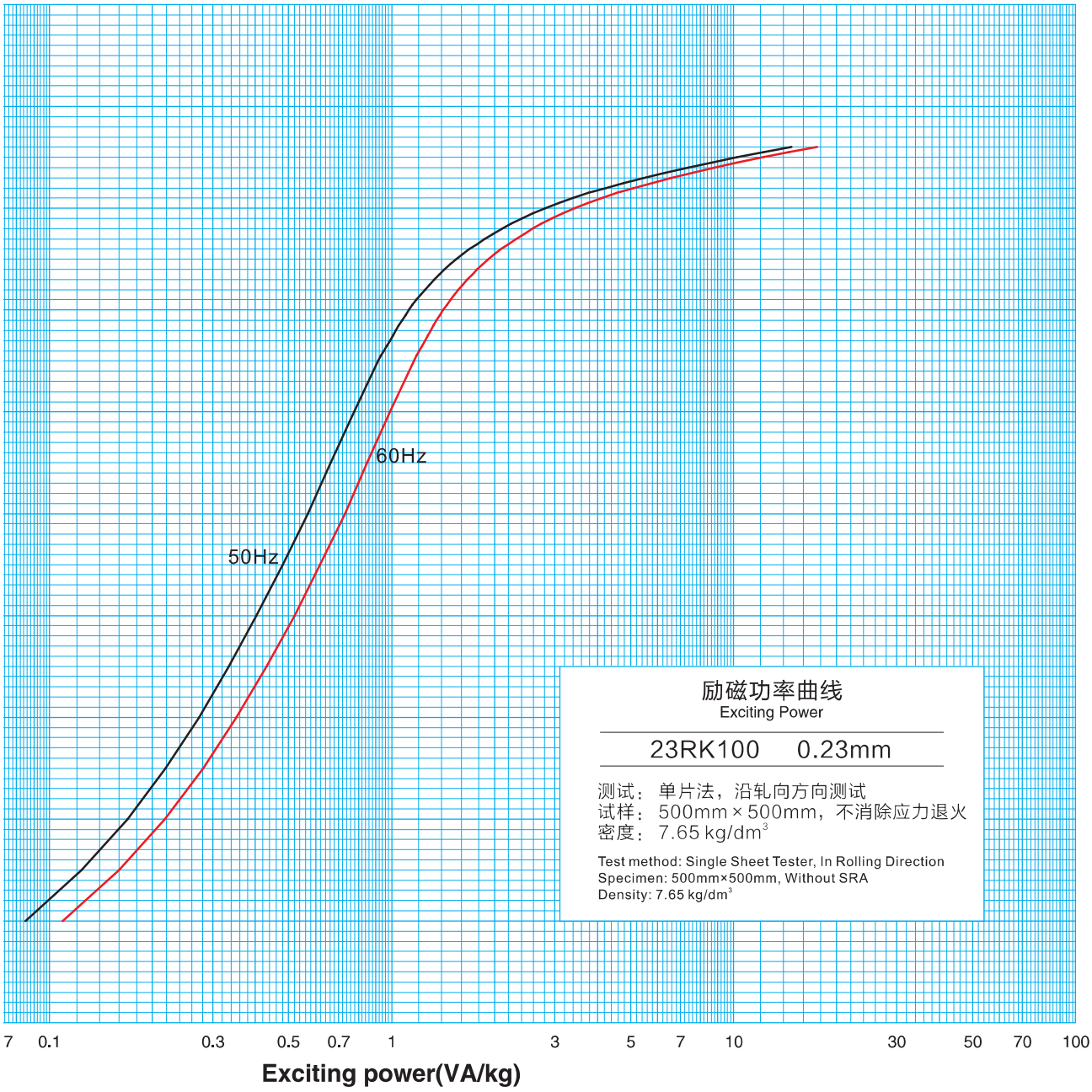
23RK100

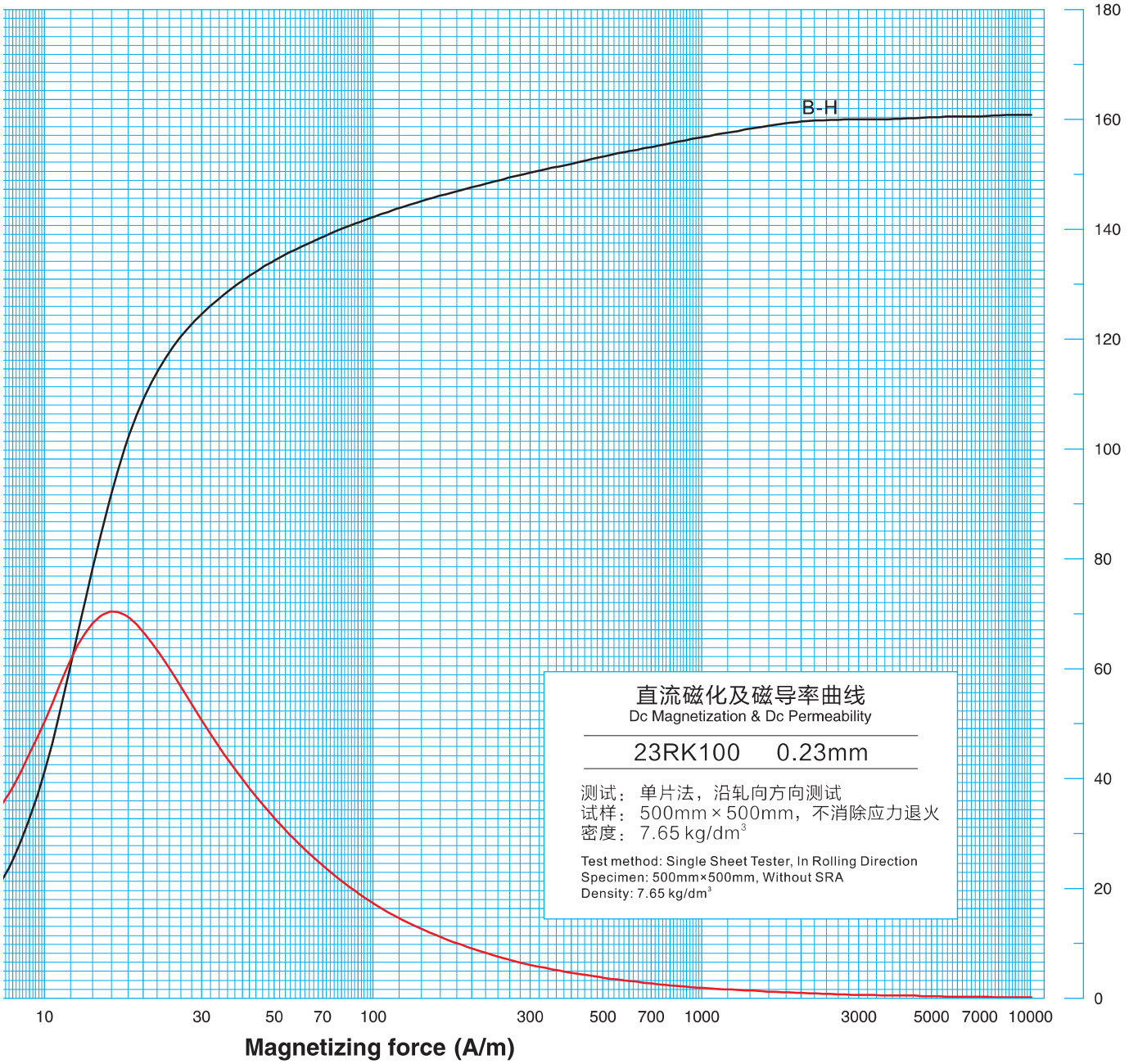
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.057	0.085	0.077	0.109	1.66	0.886	1.333	1.145	1.665
0.50	0.087	0.124	0.116	0.160	1.67	0.904	1.380	1.169	1.722
0.60	0.122	0.169	0.162	0.217	1.68	0.922	1.427	1.192	1.781
0.70	0.162	0.218	0.215	0.281	1.69	0.944	1.486	1.216	1.847
0.80	0.207	0.274	0.275	0.352	1.70	0.965	1.548	1.243	1.921
0.90	0.259	0.335	0.342	0.431	1.71	0.986	1.616	1.272	2.006
1.00	0.315	0.403	0.416	0.520	1.72	1.010	1.693	1.296	2.091
1.10	0.378	0.480	0.498	0.617	1.73	1.034	1.778	1.330	2.199
1.20	0.449	0.568	0.589	0.730	1.74	1.060	1.872	1.362	2.311
1.30	0.522	0.664	0.683	0.850	1.75	1.086	1.979	1.402	2.444
1.40	0.603	0.777	0.788	0.992	1.76	1.117	2.105	1.431	2.585
1.50	0.689	0.915	0.897	1.163	1.77	1.143	2.239	1.466	2.748
1.51	0.698	0.932	0.909	1.183	1.78	1.178	2.406	1.506	2.941
1.52	0.709	0.951	0.923	1.205	1.79	1.212	2.595	1.543	3.161
1.53	0.719	0.969	0.935	1.227	1.80	1.249	2.818	1.592	3.433
1.54	0.730	0.989	0.949	1.252	1.81	1.286	3.081	1.644	3.749
1.55	0.740	1.008	0.962	1.275	1.82	1.329	3.399	1.696	4.128
1.56	0.751	1.029	0.977	1.301	1.83	1.368	3.769	1.743	4.570
1.57	0.761	1.050	0.991	1.328	1.84	1.412	4.223	1.795	5.105
1.58	0.771	1.072	1.004	1.355	1.85	1.460	4.780	1.866	5.784
1.59	0.783	1.097	1.020	1.385	1.86	1.516	5.460	1.916	6.589
1.60	0.795	1.123	1.037	1.418	1.87	1.568	6.299	1.982	7.588
1.61	0.810	1.153	1.054	1.454	1.88	1.625	7.362	2.049	8.768
1.62	0.823	1.182	1.070	1.488	1.89	1.680	8.636	2.117	10.258
1.63	0.838	1.215	1.088	1.527	1.90	1.733	10.231	2.194	12.180
1.64	0.853	1.251	1.105	1.568	1.91	1.791	12.253	2.258	14.536
1.65	0.869	1.290	1.124	1.614	1.92	1.852	14.759	2.330	17.533

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.029	10	0.507	60	1.671	402	1.857	3016	1.955
3	0.056	12	0.745	70	1.694	502	1.873	4022	1.957
4	0.090	15	1.053	80	1.712	602	1.885	5020	1.960
5	0.128	18	1.254	90	1.726	703	1.894	6024	1.962
6	0.178	20	1.337	100	1.738	803	1.903	7028	1.962
7	0.237	30	1.523	151	1.780	1004	1.916	8033	1.964
8	0.310	40	1.597	201	1.805	1508	1.939	9036	1.965
9	0.404	50	1.642	302	1.837	2010	1.950	10042	1.965


60Hz
50Hz
铁损曲线
Core Loss
23RK100 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

23RK100


60Hz
50Hz
励磁功率曲线
Exciting Power
23RK100 0.23mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)



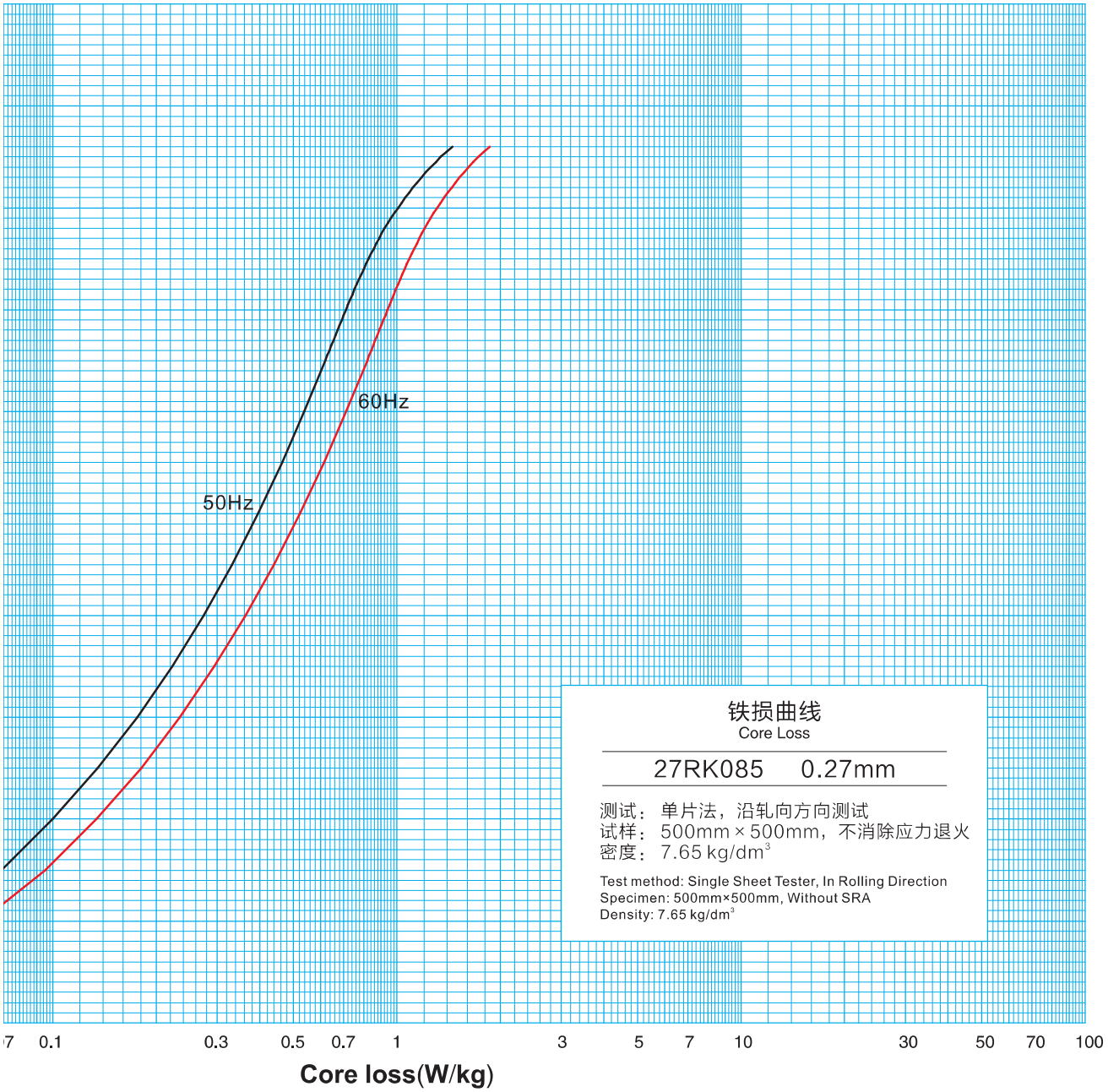
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

23RK100

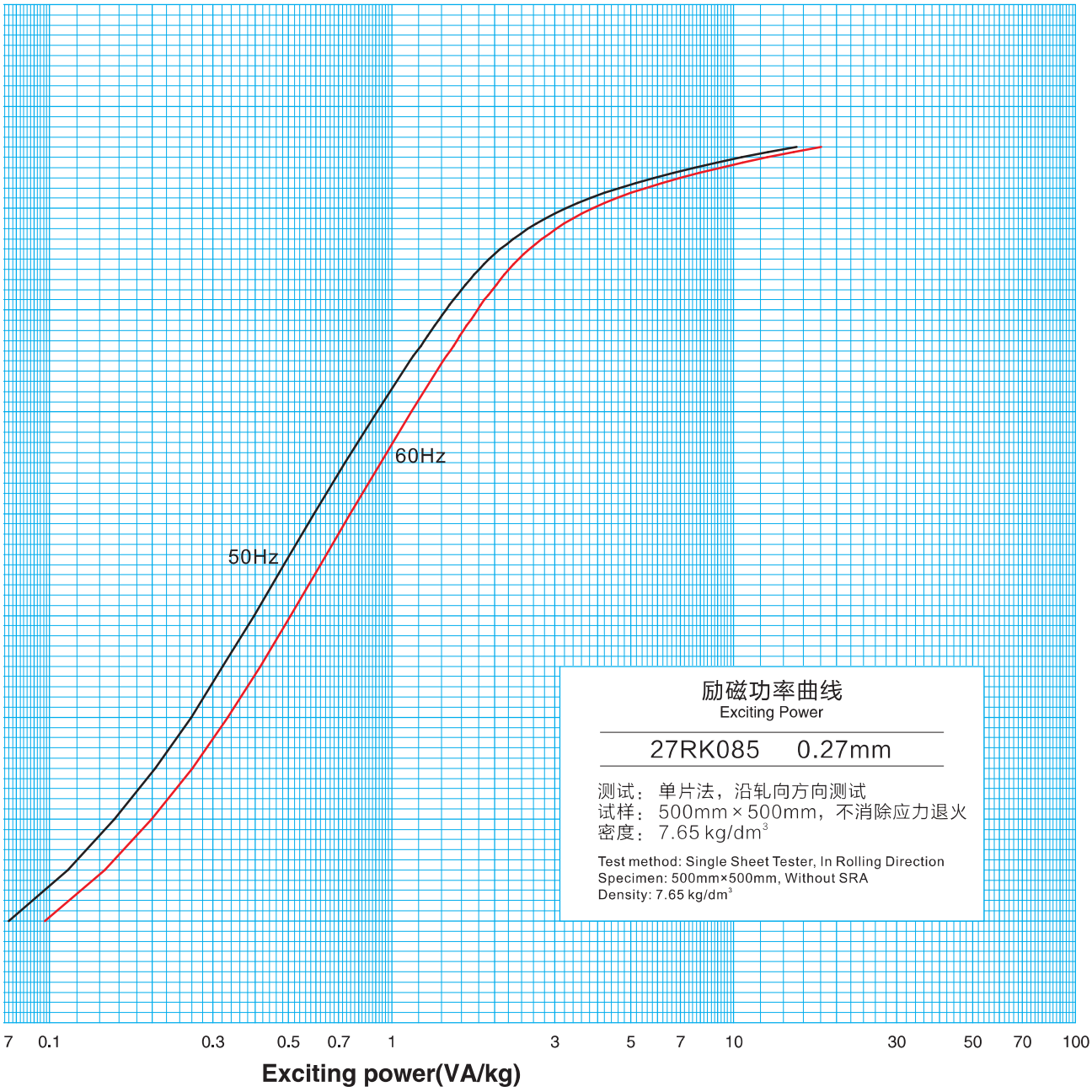
27RK085

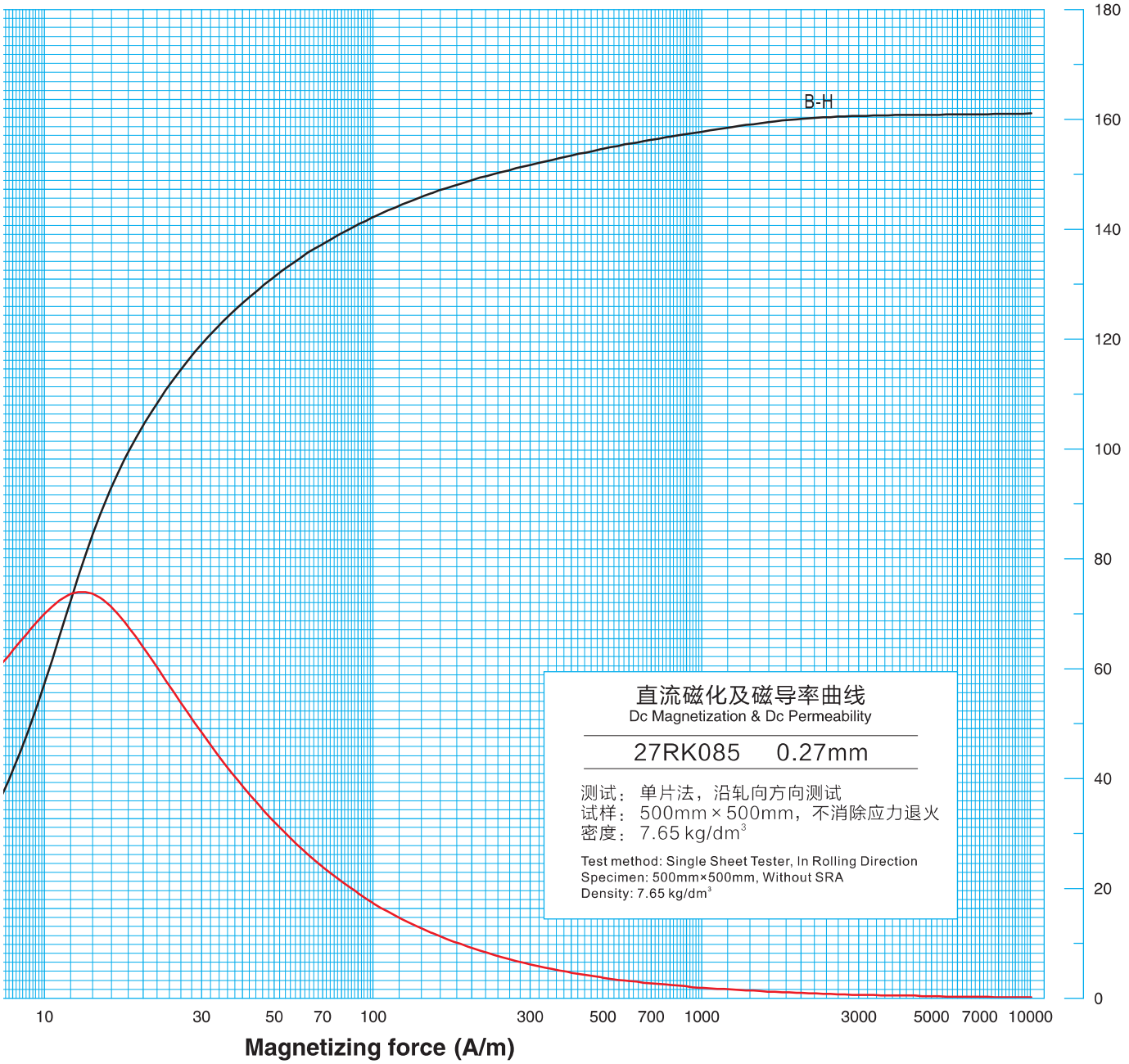
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.046	0.076	0.062	0.097	1.66	0.776	1.695	1.023	2.081
0.50	0.071	0.113	0.095	0.145	1.67	0.788	1.747	1.038	2.142
0.60	0.100	0.155	0.134	0.199	1.68	0.801	1.803	1.054	2.209
0.70	0.135	0.204	0.181	0.261	1.69	0.814	1.863	1.070	2.278
0.80	0.176	0.259	0.234	0.332	1.70	0.827	1.929	1.087	2.354
0.90	0.222	0.321	0.295	0.413	1.71	0.841	2.001	1.104	2.437
1.00	0.274	0.396	0.363	0.507	1.72	0.856	2.080	1.123	2.533
1.10	0.331	0.484	0.439	0.620	1.73	0.871	2.168	1.142	2.634
1.20	0.395	0.593	0.523	0.757	1.74	0.887	2.268	1.162	2.747
1.30	0.464	0.731	0.614	0.930	1.75	0.904	2.380	1.183	2.882
1.40	0.538	0.906	0.712	1.143	1.76	0.922	2.507	1.206	3.030
1.50	0.619	1.134	0.819	1.417	1.77	0.941	2.652	1.229	3.194
1.51	0.627	1.161	0.831	1.450	1.78	0.961	2.821	1.254	3.393
1.52	0.636	1.189	0.842	1.482	1.79	0.983	3.014	1.280	3.613
1.53	0.645	1.217	0.853	1.516	1.80	1.007	3.240	1.309	3.882
1.54	0.654	1.246	0.865	1.551	1.81	1.031	3.506	1.338	4.191
1.55	0.663	1.276	0.877	1.586	1.82	1.057	3.818	1.372	4.567
1.56	0.672	1.307	0.889	1.624	1.83	1.085	4.193	1.405	5.001
1.57	0.682	1.339	0.901	1.661	1.84	1.114	4.640	1.443	5.533
1.58	0.691	1.372	0.914	1.702	1.85	1.146	5.183	1.482	6.183
1.59	0.701	1.407	0.927	1.741	1.86	1.180	5.856	1.524	6.982
1.60	0.711	1.442	0.940	1.784	1.87	1.216	6.684	1.568	7.940
1.61	0.721	1.480	0.953	1.827	1.88	1.255	7.705	1.617	9.190
1.62	0.732	1.518	0.966	1.871	1.89	1.298	8.951	1.668	10.629
1.63	0.743	1.559	0.979	1.920	1.90	1.342	10.576	1.726	12.569
1.64	0.753	1.601	0.993	1.971	1.91	1.393	12.625	1.790	14.990
1.65	0.765	1.647	1.008	2.026	1.92	1.451	15.258	1.858	18.048

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.053	10	0.704	60	1.648	402	1.875	3016	1.964
3	0.109	12	0.888	70	1.679	502	1.890	4022	1.965
4	0.175	15	1.093	80	1.703	602	1.901	5020	1.966
5	0.248	18	1.220	90	1.723	703	1.910	6024	1.967
6	0.330	20	1.279	100	1.738	803	1.917	7029	1.967
7	0.417	30	1.457	151	1.792	1004	1.929	8033	1.968
8	0.510	40	1.549	201	1.821	1508	1.947	9037	1.968
9	0.606	50	1.606	302	1.855	2010	1.957	10042	1.969


60Hz
50Hz
铁损曲线
Core Loss
27RK085 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27RK085


60Hz
50Hz
励磁功率曲线
Exciting Power
27RK085 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

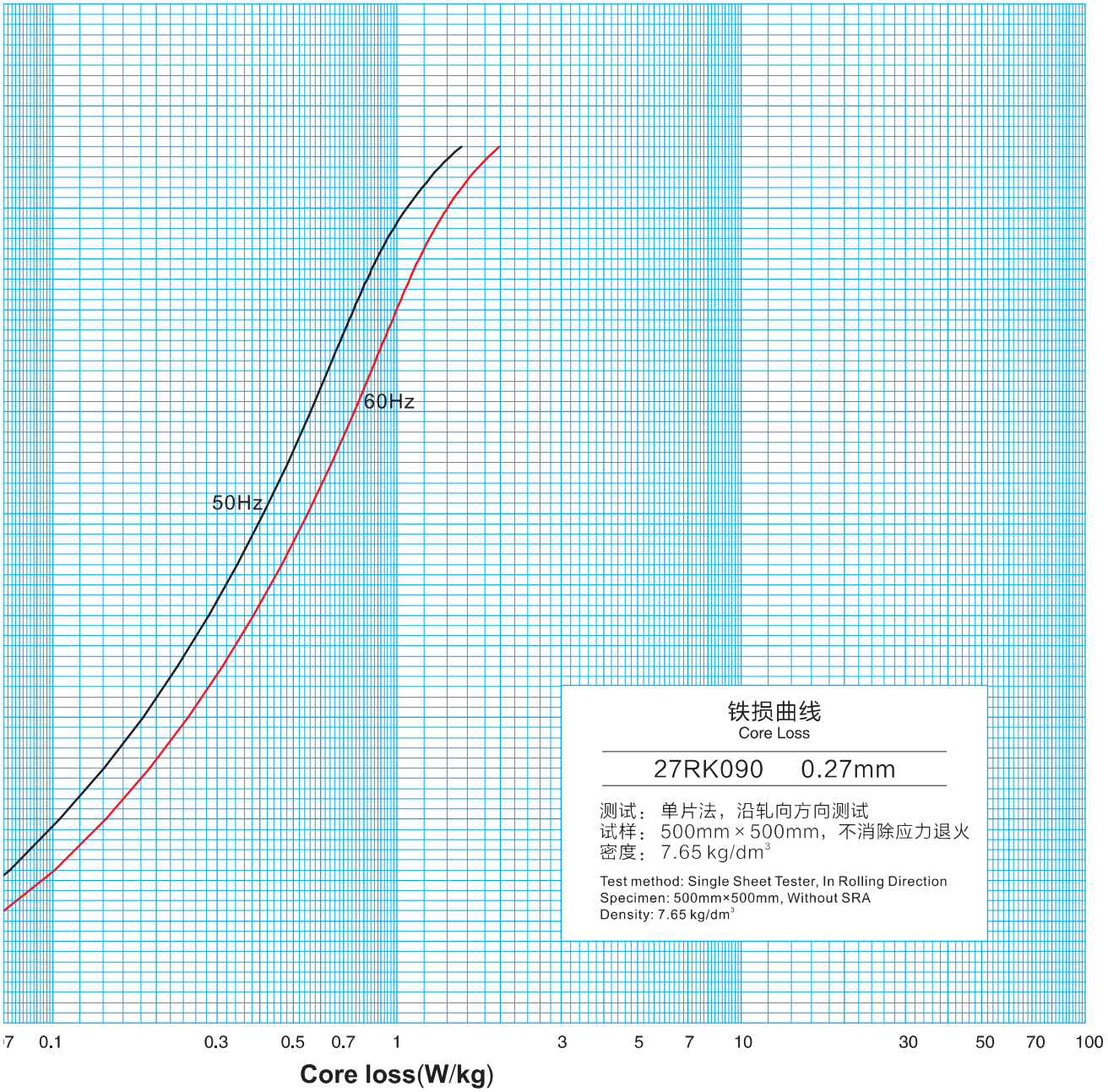

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27RK085 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

27RK085

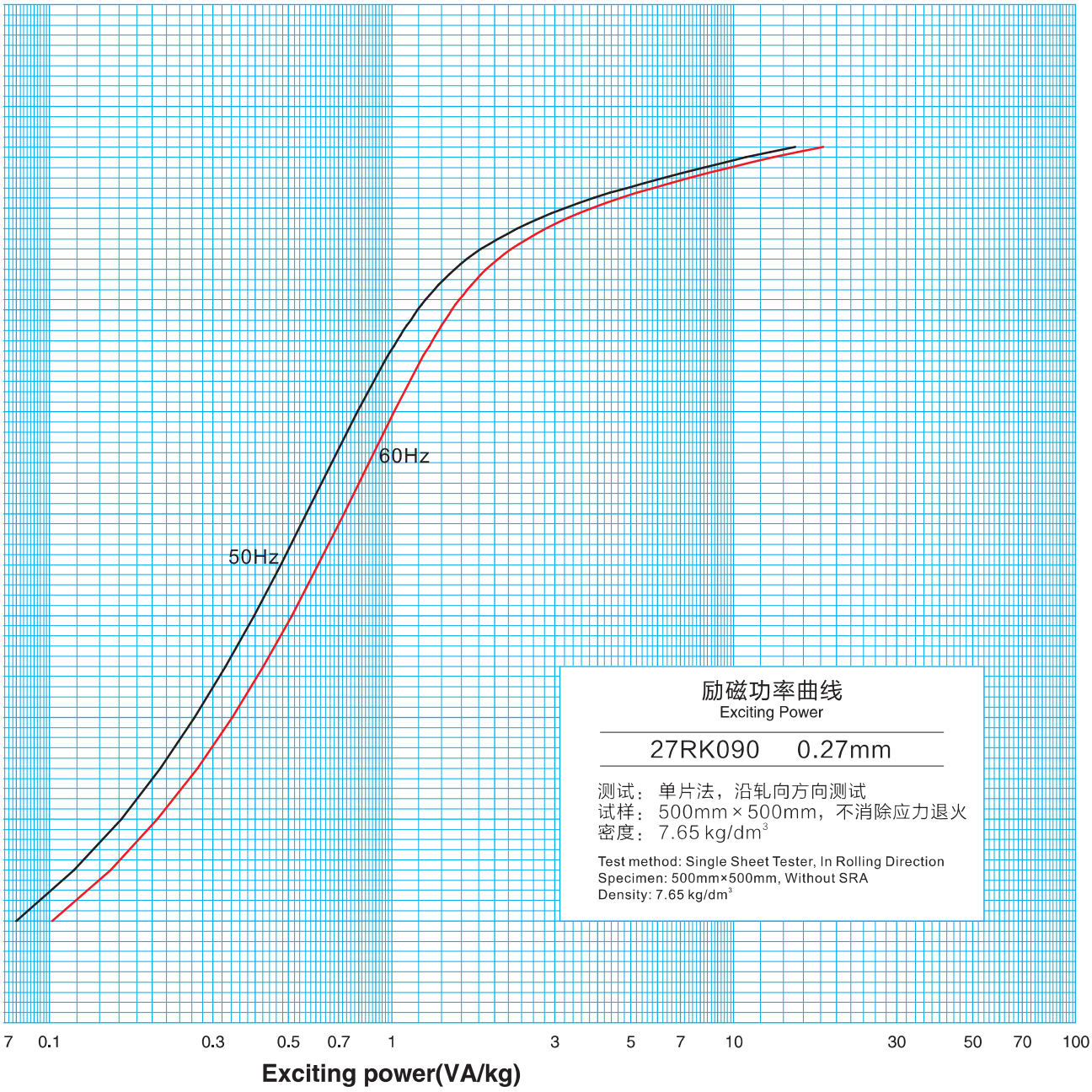
27RK090

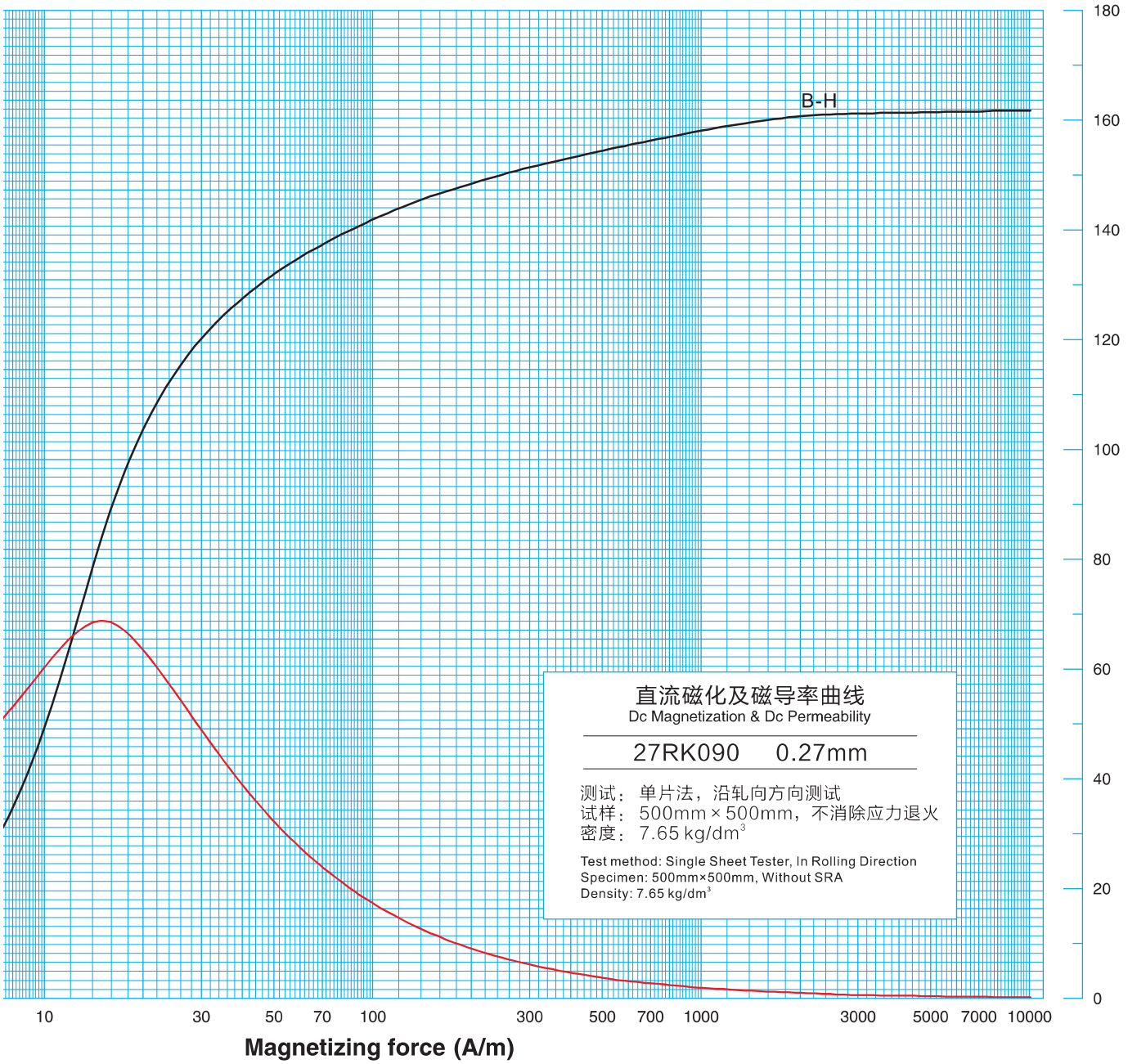
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.049	0.080	0.066	0.102	1.66	0.819	1.421	1.090	1.770
0.50	0.075	0.118	0.101	0.151	1.67	0.832	1.472	1.106	1.827
0.60	0.105	0.162	0.143	0.207	1.68	0.845	1.528	1.123	1.891
0.70	0.141	0.211	0.191	0.271	1.69	0.860	1.592	1.141	1.967
0.80	0.183	0.266	0.247	0.342	1.70	0.874	1.661	1.160	2.047
0.90	0.230	0.327	0.311	0.421	1.71	0.889	1.739	1.179	2.138
1.00	0.284	0.396	0.382	0.511	1.72	0.906	1.829	1.200	2.243
1.10	0.344	0.474	0.462	0.611	1.73	0.923	1.929	1.221	2.357
1.20	0.409	0.562	0.550	0.726	1.74	0.940	2.044	1.243	2.490
1.30	0.482	0.668	0.646	0.860	1.75	0.959	2.176	1.266	2.641
1.40	0.561	0.795	0.751	1.017	1.76	0.979	2.326	1.291	2.818
1.50	0.648	0.956	0.866	1.215	1.77	1.000	2.504	1.317	3.024
1.51	0.657	0.976	0.879	1.239	1.78	1.021	2.702	1.344	3.259
1.52	0.666	0.996	0.892	1.264	1.79	1.045	2.937	1.373	3.531
1.53	0.676	1.017	0.904	1.290	1.80	1.070	3.211	1.403	3.848
1.54	0.686	1.039	0.917	1.316	1.81	1.096	3.531	1.436	4.230
1.55	0.696	1.060	0.930	1.343	1.82	1.124	3.905	1.470	4.675
1.56	0.705	1.083	0.943	1.372	1.83	1.153	4.348	1.506	5.200
1.57	0.716	1.109	0.957	1.403	1.84	1.185	4.872	1.543	5.816
1.58	0.726	1.136	0.971	1.433	1.85	1.217	5.485	1.585	6.557
1.59	0.737	1.162	0.984	1.465	1.86	1.252	6.227	1.628	7.417
1.60	0.748	1.192	0.998	1.500	1.87	1.290	7.108	1.675	8.455
1.61	0.759	1.224	1.013	1.537	1.88	1.330	8.167	1.727	9.738
1.62	0.770	1.257	1.027	1.575	1.89	1.375	9.412	1.784	11.175
1.63	0.782	1.293	1.042	1.619	1.90	1.425	10.845	1.845	13.071
1.64	0.794	1.332	1.058	1.666	1.91	1.476	12.784	1.912	15.400
1.65	0.806	1.375	1.074	1.715	1.92	1.537	15.197	1.986	18.290

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.042	10	0.607	60	1.651	402	1.872	3016	1.970
3	0.088	12	0.793	70	1.679	502	1.888	4022	1.972
4	0.141	15	1.037	80	1.701	602	1.900	5020	1.973
5	0.202	18	1.198	90	1.719	703	1.910	6023	1.974
6	0.270	20	1.272	100	1.735	803	1.918	7028	1.975
7	0.346	30	1.471	151	1.786	1004	1.931	8032	1.976
8	0.428	40	1.560	201	1.815	1508	1.953	9036	1.977
9	0.515	50	1.613	302	1.851	2010	1.964	10041	1.977


60Hz
50Hz
铁损曲线
Core Loss
27RK090 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27RK090


60Hz
50Hz
励磁功率曲线
Exciting Power
27RK090 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

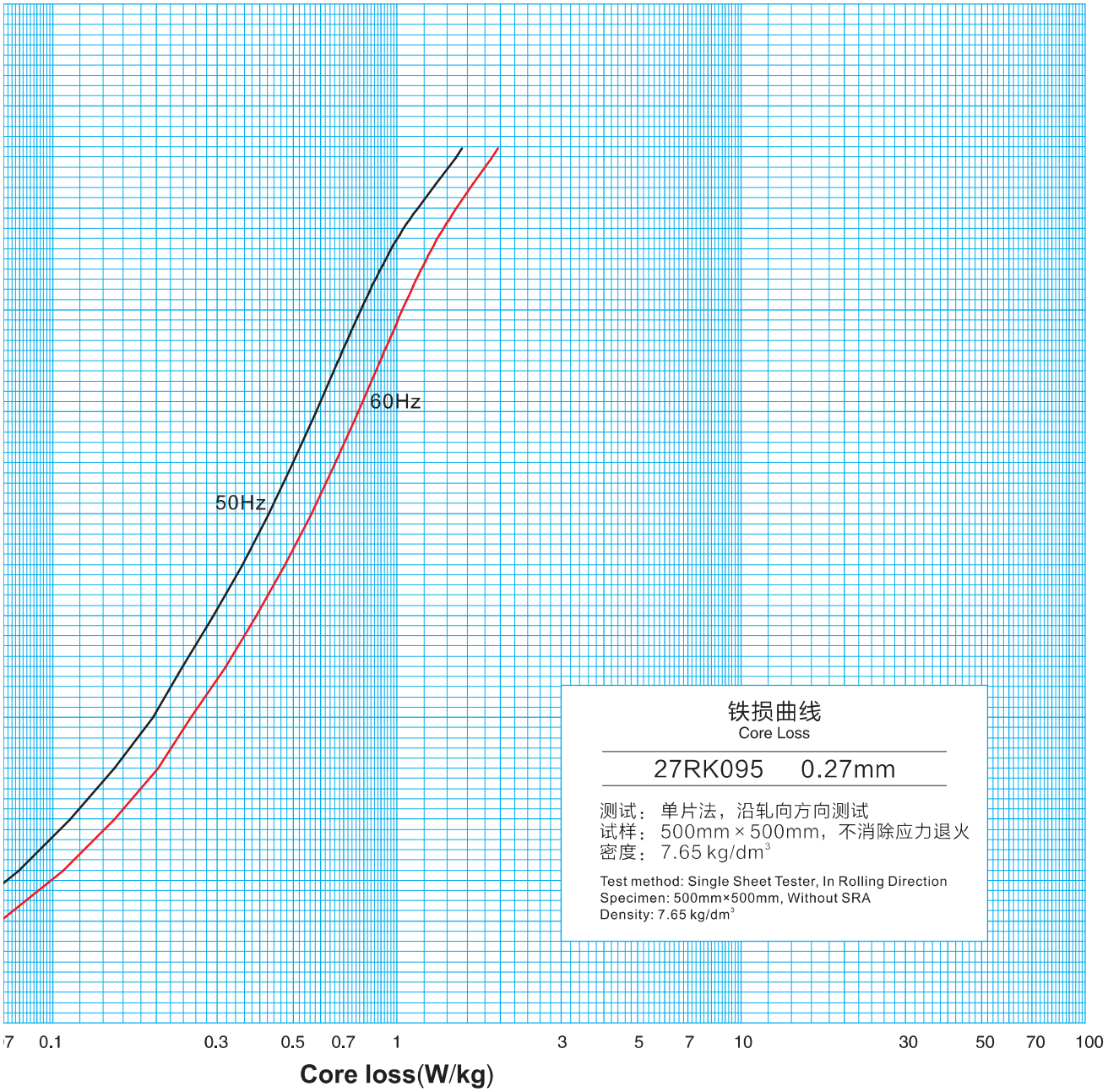

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27RK090 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

27RK090

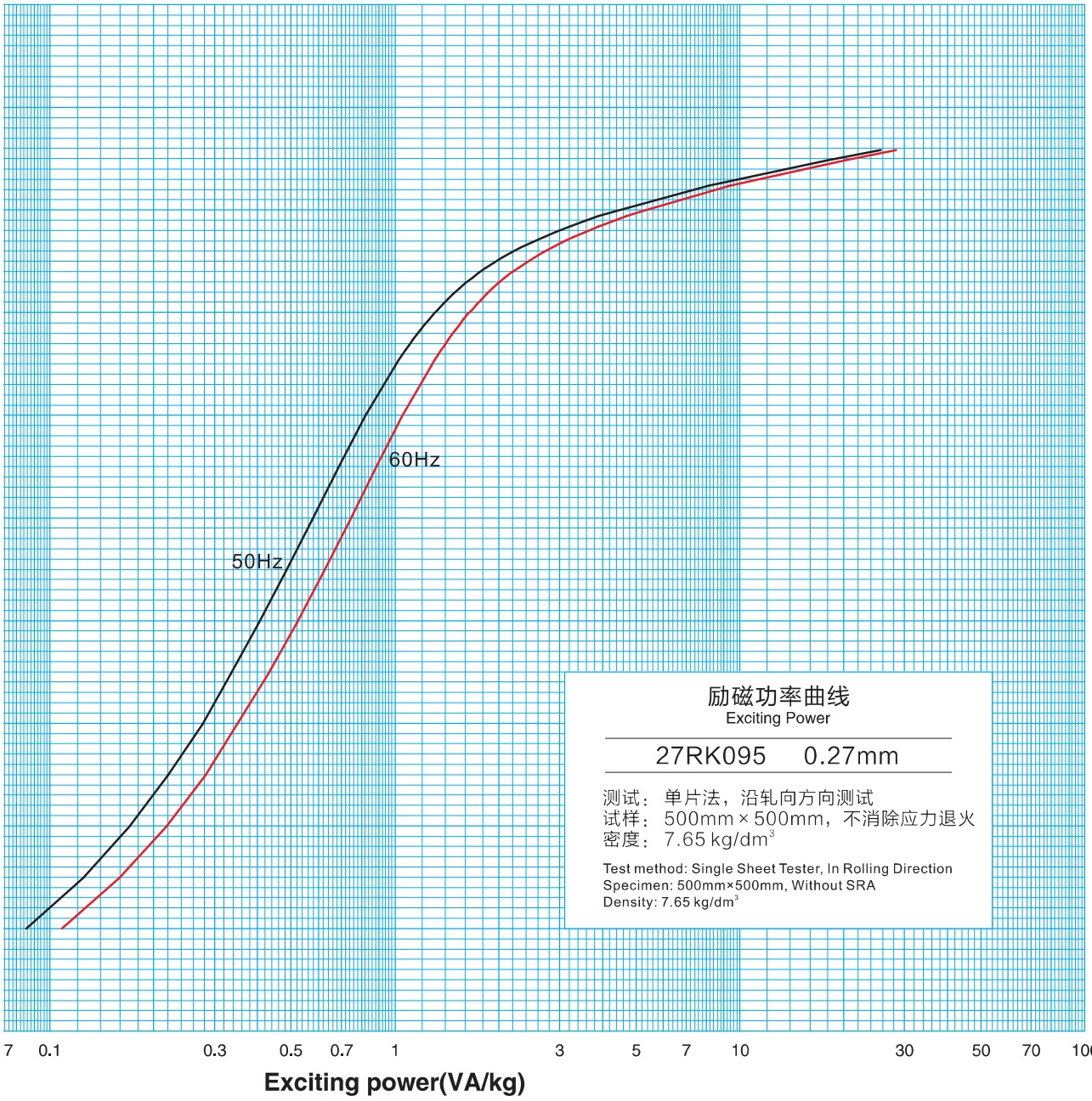
27RK095

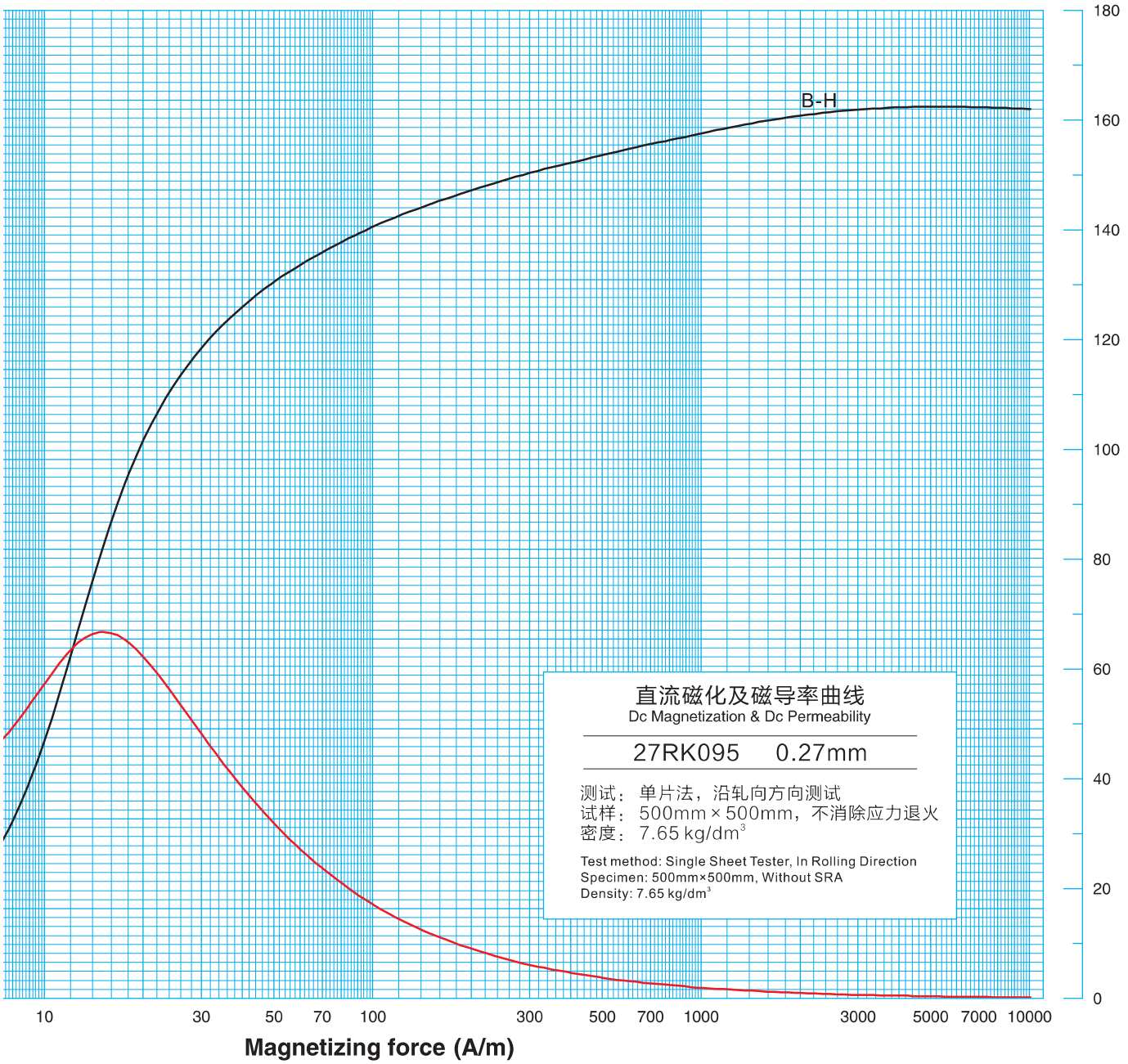
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.050	0.090	0.067	0.114	1.66	0.860	1.734	1.133	2.136
0.50	0.076	0.133	0.102	0.168	1.67	0.875	1.810	1.151	2.224
0.60	0.108	0.181	0.145	0.230	1.68	0.890	1.893	1.170	2.314
0.70	0.145	0.236	0.195	0.300	1.69	0.907	1.989	1.191	2.428
0.80	0.189	0.298	0.252	0.379	1.70	0.924	2.092	1.214	2.556
0.90	0.237	0.367	0.316	0.466	1.71	0.942	2.212	1.236	2.694
1.00	0.292	0.444	0.389	0.566	1.72	0.961	2.343	1.258	2.836
1.10	0.353	0.532	0.470	0.678	1.73	0.981	2.496	1.285	3.029
1.20	0.421	0.632	0.559	0.804	1.74	1.002	2.668	1.309	3.215
1.30	0.495	0.751	0.659	0.954	1.75	1.024	2.863	1.336	3.441
1.40	0.576	0.894	0.766	1.134	1.76	1.047	3.088	1.365	3.707
1.50	0.669	1.090	0.888	1.373	1.77	1.072	3.348	1.397	4.031
1.51	0.680	1.114	0.901	1.403	1.78	1.098	3.644	1.429	4.378
1.52	0.690	1.140	0.914	1.433	1.79	1.125	3.986	1.463	4.790
1.53	0.700	1.167	0.928	1.466	1.80	1.154	4.387	1.499	5.268
1.54	0.711	1.196	0.942	1.500	1.81	1.183	4.848	1.533	5.773
1.55	0.721	1.225	0.956	1.535	1.82	1.215	5.388	1.573	6.419
1.56	0.732	1.257	0.969	1.571	1.83	1.249	6.032	1.616	7.192
1.57	0.744	1.289	0.984	1.612	1.84	1.285	6.778	1.659	8.051
1.58	0.755	1.325	1.000	1.657	1.85	1.323	7.668	1.709	9.180
1.59	0.767	1.362	1.015	1.700	1.86	1.362	8.713	1.759	10.448
1.60	0.779	1.404	1.030	1.746	1.87	1.409	9.938	1.814	11.937
1.61	0.792	1.448	1.046	1.799	1.88	1.453	11.440	1.869	13.642
1.62	0.804	1.495	1.061	1.851	1.89	1.504	13.242	1.935	15.774
1.63	0.817	1.546	1.079	1.916	1.90	1.555	15.449	1.998	18.481
1.64	0.831	1.603	1.095	1.978	1.91	1.613	18.056	2.067	21.483
1.65	0.845	1.666	1.114	2.055	1.92	1.670	21.146	2.133	25.482

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.043	10	0.576	60	1.634	402	1.861	3016	1.979
3	0.084	12	0.765	70	1.662	502	1.878	4022	1.984
4	0.133	15	1.007	80	1.684	602	1.892	5019	1.986
5	0.188	18	1.171	90	1.703	703	1.903	6024	1.985
6	0.251	20	1.246	100	1.719	803	1.911	7028	1.984
7	0.321	30	1.449	151	1.770	1004	1.926	8033	1.983
8	0.398	40	1.541	201	1.800	1508	1.951	9036	1.981
9	0.485	50	1.596	302	1.838	2010	1.966	10042	1.980


60Hz
50Hz
铁损曲线
Core Loss
27RK095 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27RK095


60Hz
50Hz
励磁功率曲线
Exciting Power
27RK095 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

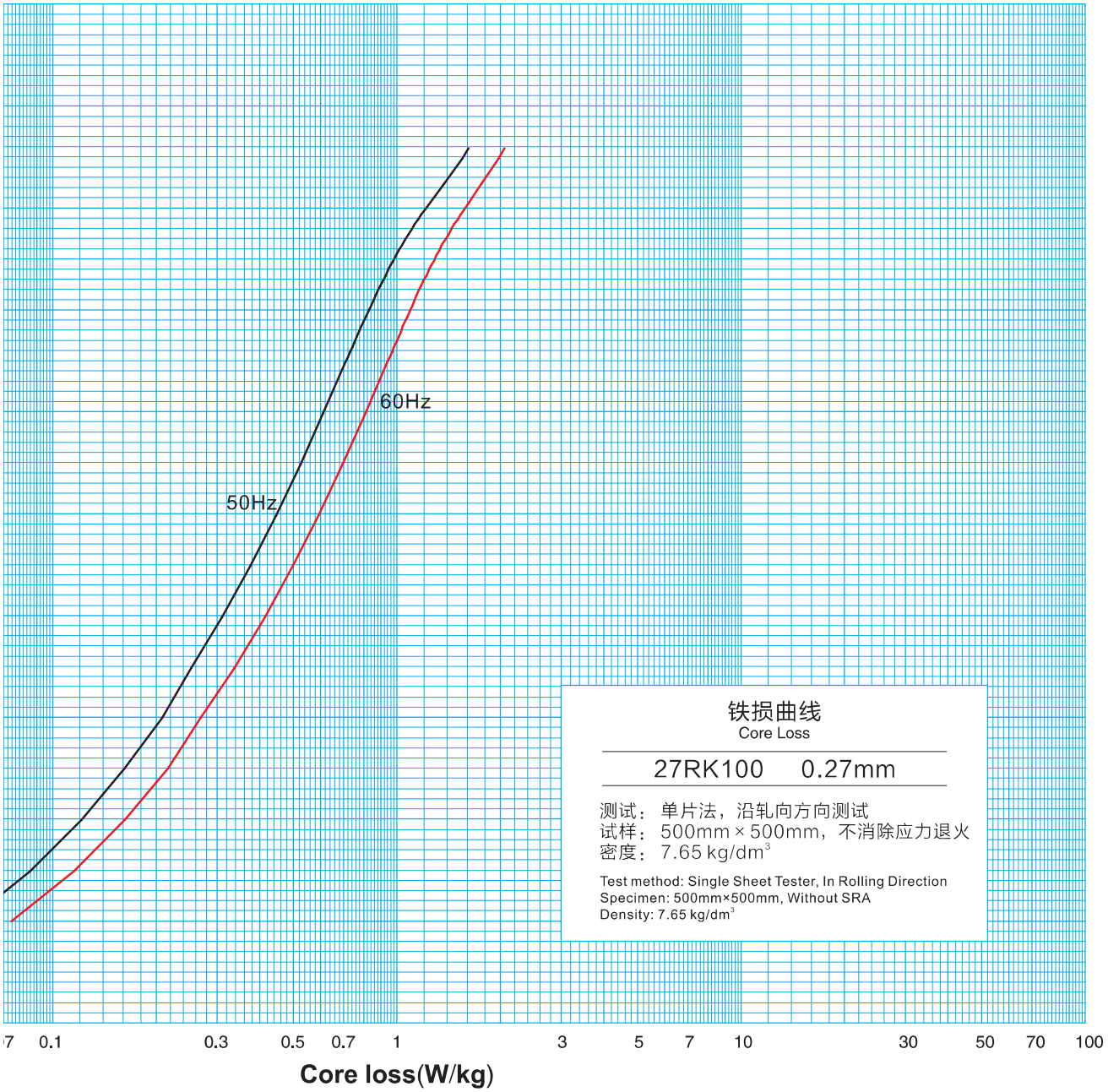

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27RK095 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

27RK095

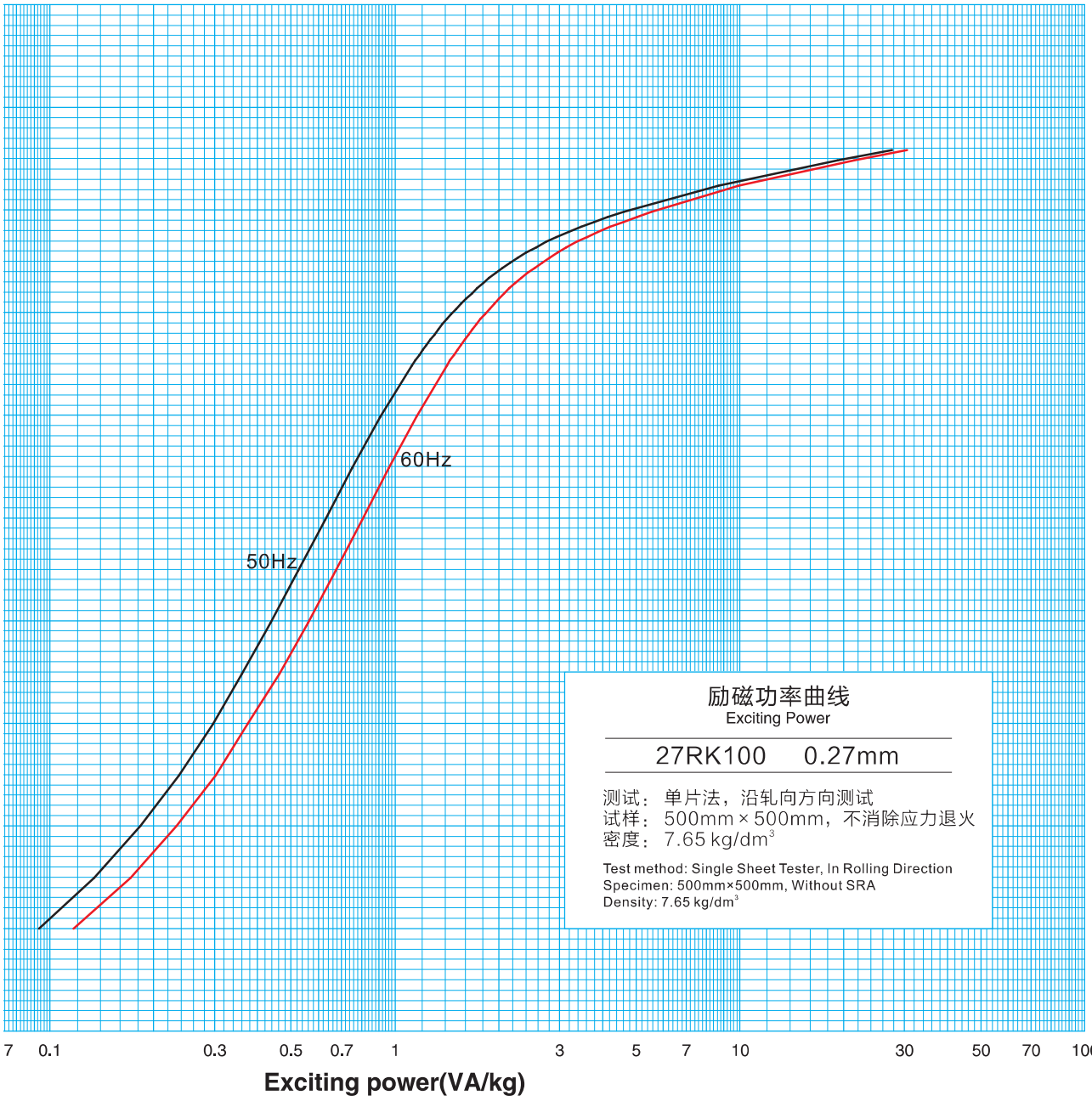
27RK100

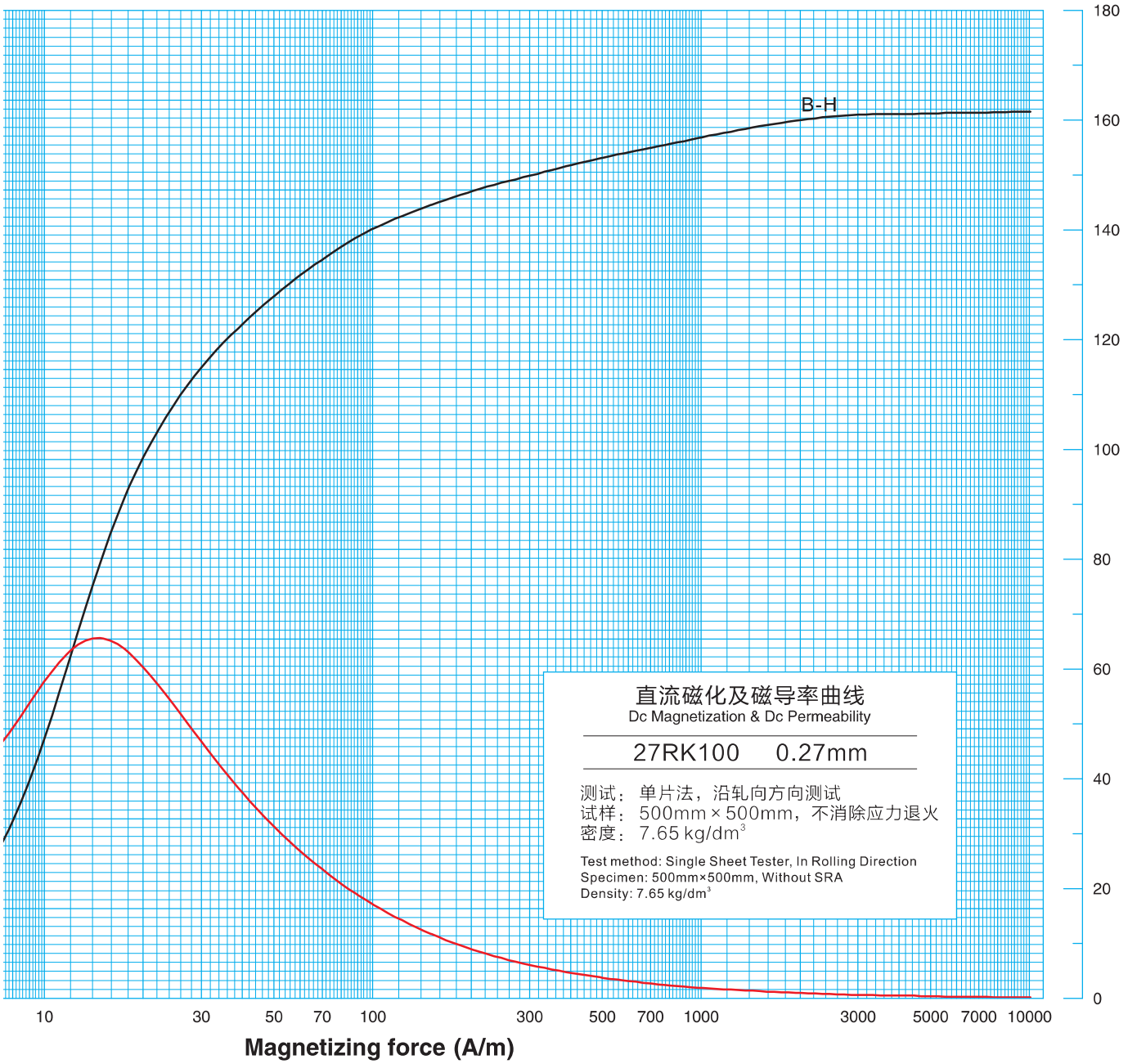
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.057	0.093	0.076	0.117	1.62	0.853	1.555	1.124	1.940
0.50	0.086	0.134	0.115	0.172	1.63	0.867	1.610	1.141	2.006
0.60	0.121	0.183	0.162	0.233	1.64	0.881	1.669	1.160	2.075
0.70	0.161	0.237	0.216	0.303	1.65	0.895	1.728	1.177	2.149
0.80	0.208	0.297	0.268	0.375	1.66	0.911	1.804	1.197	2.234
0.90	0.252	0.360	0.337	0.462	1.67	0.927	1.876	1.218	2.330
1.00	0.310	0.436	0.413	0.561	1.68	0.943	1.964	1.238	2.431
1.10	0.375	0.526	0.498	0.673	1.69	0.958	2.046	1.259	2.540
1.20	0.446	0.628	0.592	0.805	1.70	0.976	2.153	1.282	2.669
1.30	0.524	0.751	0.695	0.960	1.71	0.995	2.273	1.305	2.809
1.40	0.610	0.907	0.811	1.154	1.72	1.014	2.404	1.328	2.968
1.50	0.710	1.121	0.939	1.415	1.73	1.035	2.575	1.353	3.142
1.51	0.720	1.146	0.952	1.446	1.74	1.056	2.746	1.381	3.369
1.52	0.731	1.176	0.968	1.482	1.75	1.078	2.943	1.409	3.605
1.53	0.742	1.205	0.982	1.517	1.76	1.102	3.197	1.437	3.880
1.54	0.753	1.234	0.997	1.556	1.77	1.126	3.470	1.468	4.216
1.55	0.764	1.265	1.012	1.594	1.78	1.151	3.774	1.501	4.599
1.56	0.776	1.299	1.027	1.636	1.79	1.178	4.145	1.534	5.040
1.57	0.789	1.338	1.042	1.677	1.80	1.209	4.610	1.568	5.549
1.58	0.801	1.376	1.057	1.723	1.85	1.373	8.684	1.759	9.931
1.59	0.814	1.416	1.073	1.770	1.90	1.550	19.184	1.976	21.424
1.60	0.826	1.458	1.090	1.826	1.91	1.594	25.077	2.033	27.860
1.61	0.839	1.504	1.107	1.880	1.92	1.613	27.602	2.058	30.618

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.035	10	0.582	60	1.611	402	1.855	3016	1.967
3	0.071	12	0.766	70	1.646	502	1.871	4022	1.969
4	0.118	15	0.989	80	1.674	602	1.884	5020	1.970
5	0.174	18	1.139	90	1.696	703	1.894	6024	1.972
6	0.240	20	1.209	100	1.714	804	1.903	7029	1.972
7	0.316	30	1.406	151	1.767	1004	1.918	8034	1.973
8	0.397	40	1.503	201	1.797	1508	1.941	9037	1.974
9	0.488	50	1.565	302	1.833	2010	1.955	10043	1.974


60Hz
50Hz
铁损曲线
Core Loss
27RK100 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27RK100


60Hz
50Hz
励磁功率曲线
Exciting Power
27RK100 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

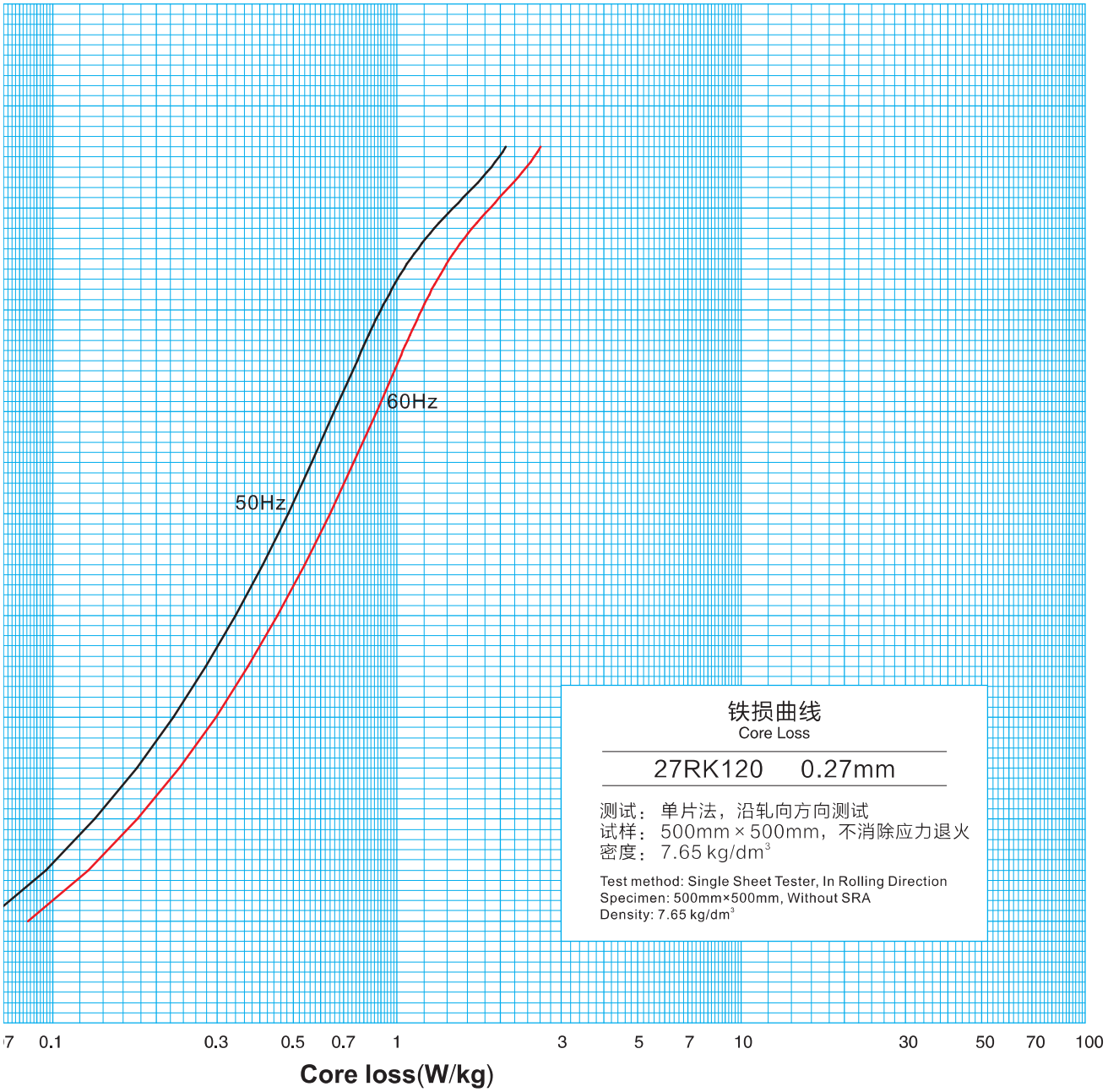

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
27RK100 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

27RK100

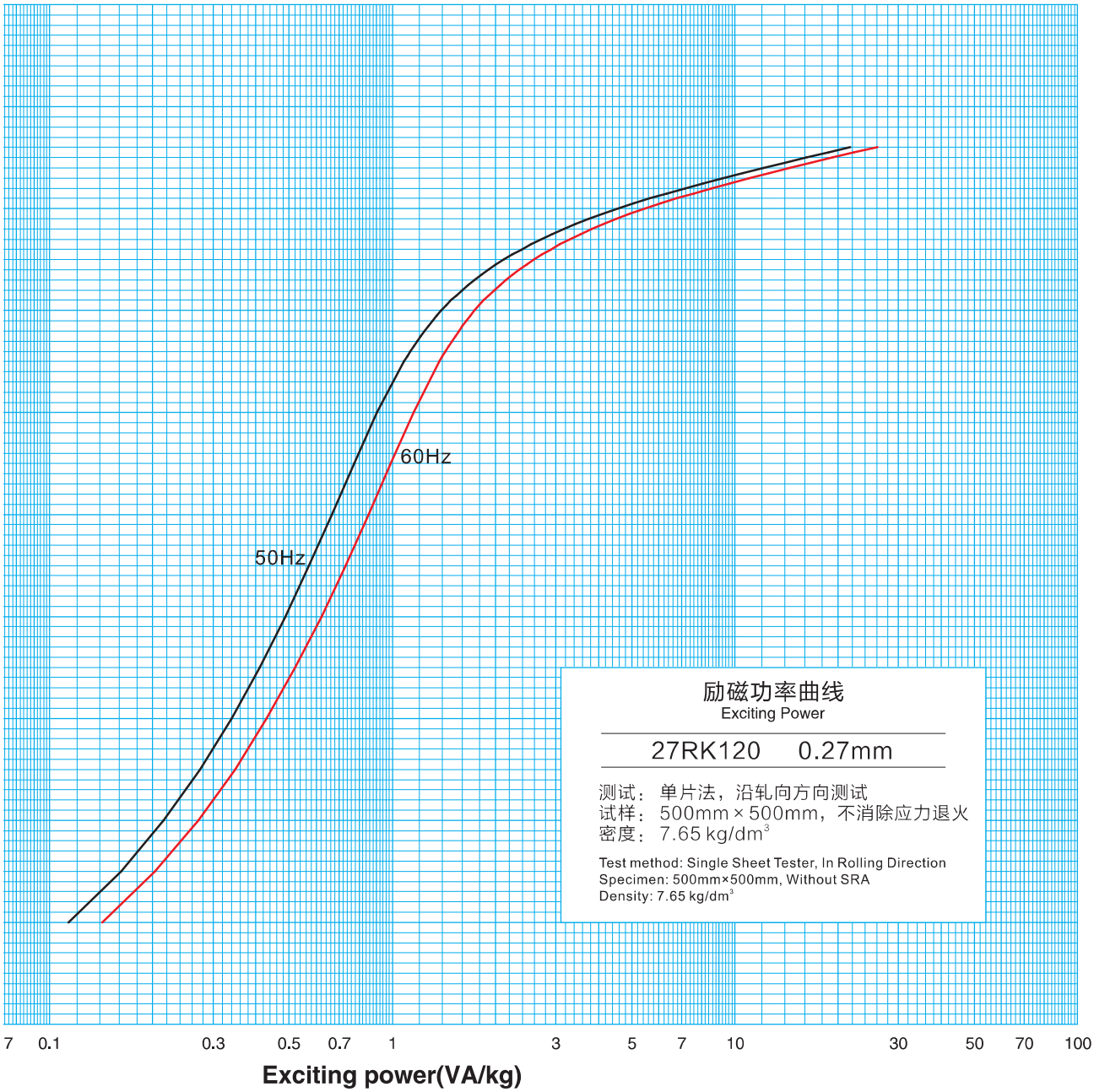
27RK120

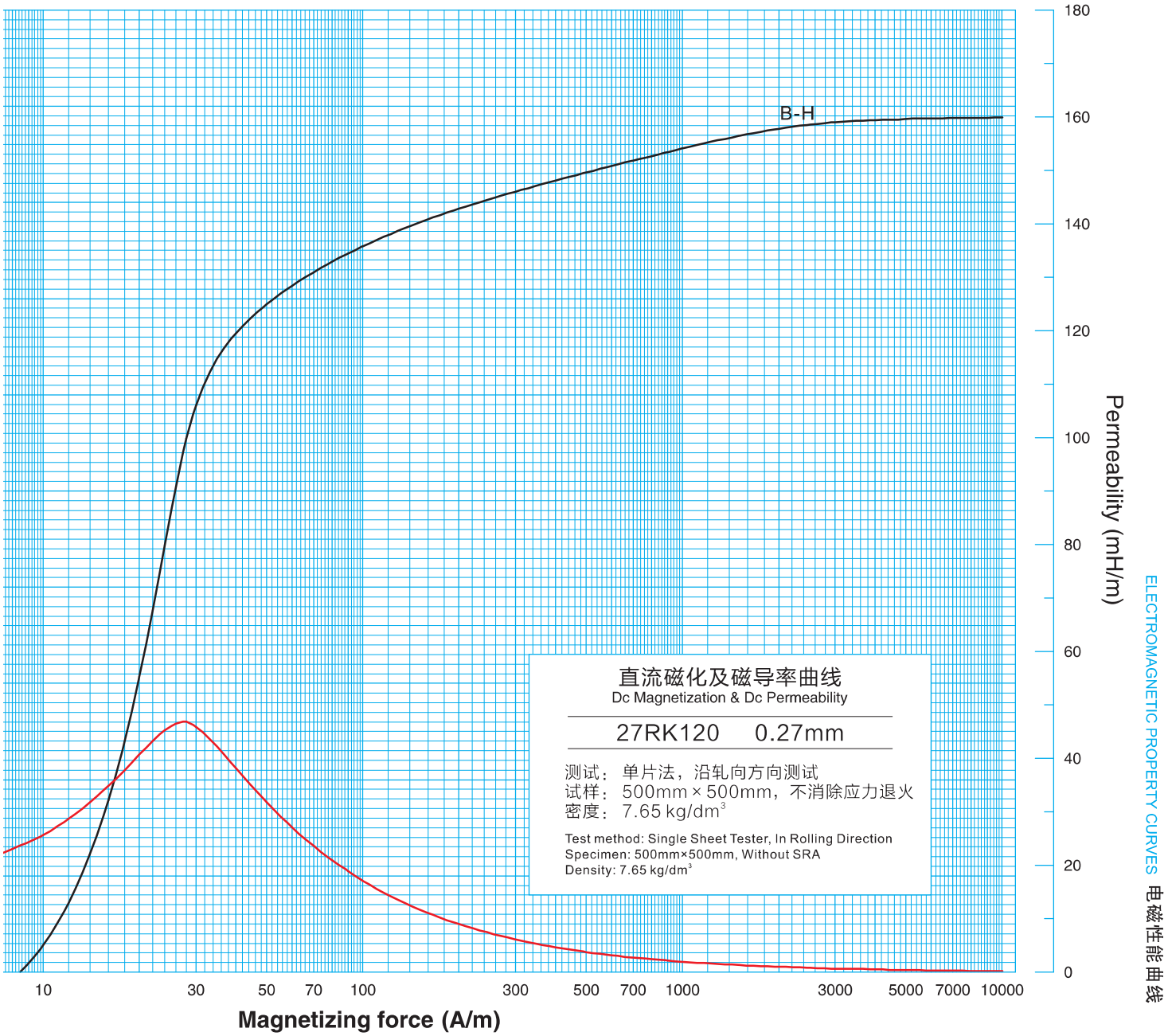
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.064	0.113	0.085	0.142	1.66	1.004	1.736	1.312	2.146
0.50	0.095	0.161	0.127	0.203	1.67	1.026	1.819	1.338	2.242
0.60	0.133	0.215	0.176	0.272	1.68	1.048	1.908	1.366	2.346
0.70	0.176	0.274	0.233	0.347	1.69	1.070	2.006	1.394	2.463
0.80	0.224	0.339	0.298	0.430	1.70	1.096	2.116	1.425	2.592
0.90	0.279	0.410	0.369	0.521	1.71	1.123	2.237	1.458	2.733
1.00	0.340	0.487	0.450	0.621	1.72	1.151	2.378	1.493	2.900
1.10	0.408	0.572	0.540	0.730	1.73	1.182	2.538	1.528	3.086
1.20	0.482	0.666	0.640	0.852	1.74	1.214	2.720	1.568	3.295
1.30	0.566	0.775	0.749	0.989	1.75	1.248	2.925	1.610	3.543
1.40	0.658	0.903	0.873	1.153	1.76	1.285	3.163	1.656	3.819
1.50	0.767	1.084	1.012	1.373	1.77	1.323	3.438	1.703	4.142
1.51	0.778	1.106	1.026	1.400	1.78	1.367	3.757	1.753	4.518
1.52	0.790	1.130	1.042	1.430	1.79	1.411	4.125	1.809	4.956
1.53	0.802	1.155	1.058	1.461	1.80	1.458	4.556	1.865	5.466
1.54	0.815	1.182	1.074	1.494	1.81	1.507	5.064	1.926	6.064
1.55	0.828	1.211	1.091	1.530	1.82	1.558	5.652	1.986	6.760
1.56	0.841	1.242	1.108	1.565	1.83	1.610	6.342	2.048	7.581
1.57	0.855	1.275	1.125	1.605	1.84	1.664	7.165	2.115	8.540
1.58	0.869	1.310	1.144	1.648	1.85	1.717	8.112	2.183	9.688
1.59	0.884	1.349	1.163	1.694	1.86	1.775	9.234	2.248	11.003
1.60	0.899	1.392	1.181	1.739	1.87	1.828	10.550	2.313	12.608
1.61	0.915	1.436	1.200	1.792	1.88	1.880	12.137	2.381	14.442
1.62	0.931	1.486	1.220	1.849	1.89	1.931	13.993	2.443	16.629
1.63	0.948	1.540	1.242	1.915	1.90	1.981	16.208	2.503	19.221
1.64	0.966	1.599	1.265	1.985	1.91	2.026	18.812	2.559	22.261
1.65	0.986	1.665	1.289	2.063	1.92	2.074	21.662	2.615	26.069

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.027	22	0.951	90	1.694	901	1.905	5500	1.974
4	0.069	24	1.086	100	1.709	1002	1.912	6002	1.974
6	0.120	26	1.208	150	1.758	1506	1.938	6497	1.975
8	0.184	28	1.310	200	1.787	2003	1.953	7005	1.975
10	0.257	30	1.377	298	1.822	2506	1.962	7500	1.975
12	0.344	40	1.527	401	1.846	3002	1.967	7997	1.976
14	0.444	50	1.588	501	1.863	3493	1.970	8499	1.976
16	0.557	60	1.627	597	1.876	4012	1.971	9000	1.976
18	0.680	70	1.655	700	1.887	4493	1.973	9501	1.976
20	0.814	80	1.676	796	1.896	5005	1.973	10001	1.977


60Hz
50Hz
铁损曲线
Core Loss
27RK120 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

27RK120


60Hz
50Hz
励磁功率曲线
Exciting Power
27RK120 0.27mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)



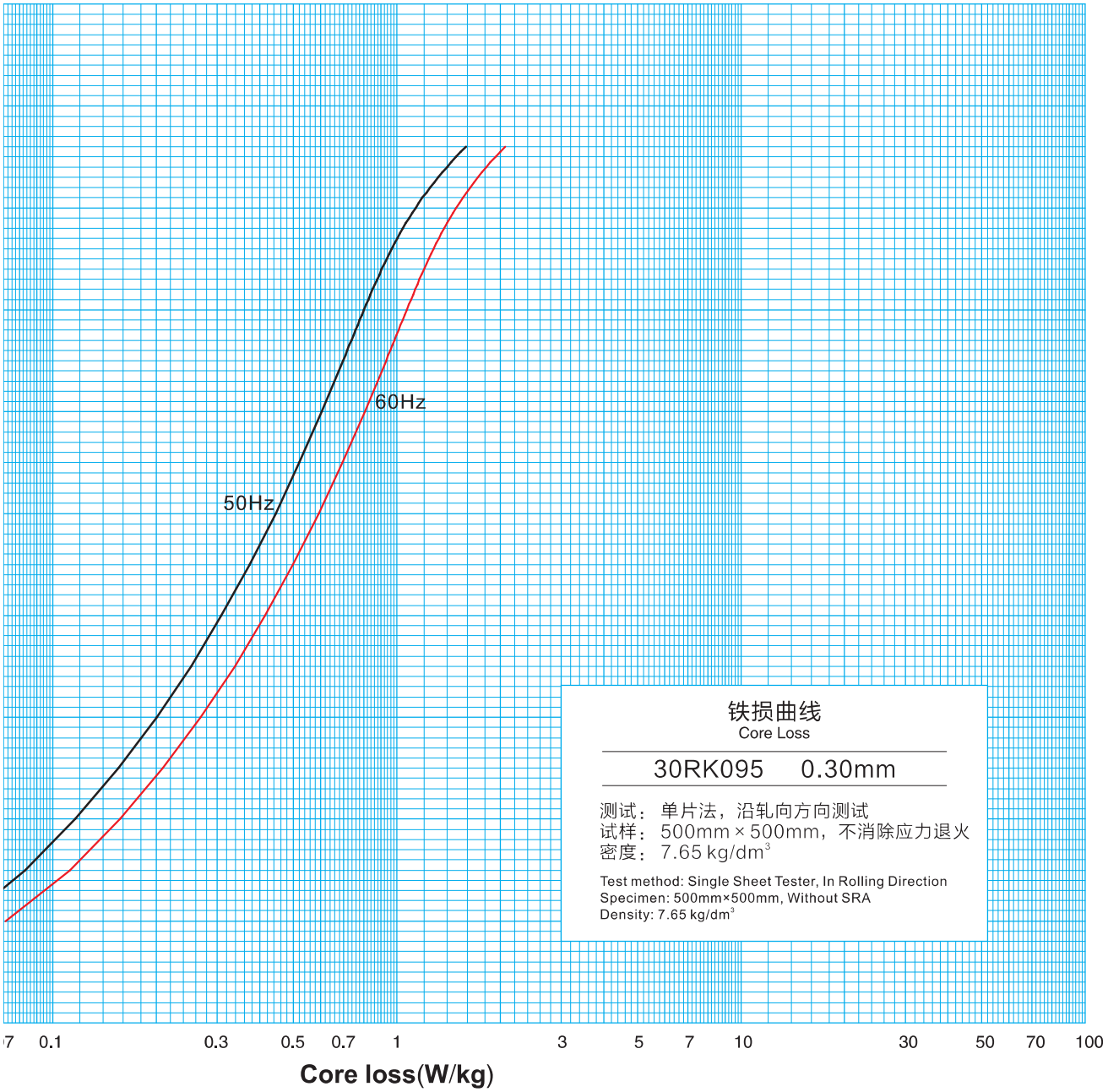
ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

27RK120

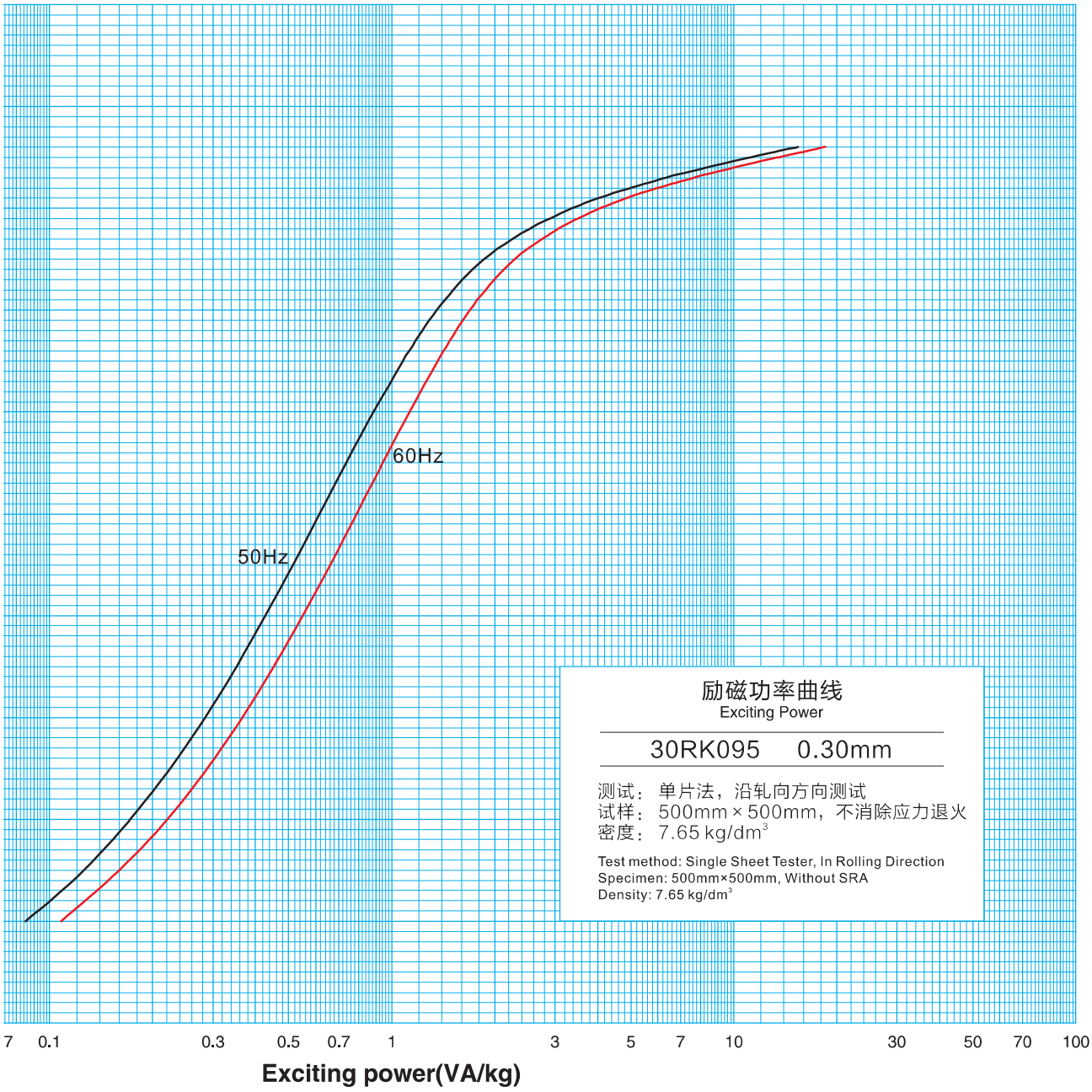
30RK095

B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.055	0.085	0.073	0.108	1.62	0.826	1.431	1.099	1.781
0.50	0.083	0.126	0.112	0.160	1.63	0.838	1.470	1.115	1.827
0.60	0.116	0.172	0.157	0.221	1.64	0.851	1.515	1.131	1.880
0.70	0.155	0.225	0.209	0.289	1.65	0.864	1.561	1.147	1.933
0.80	0.201	0.285	0.269	0.366	1.66	0.877	1.610	1.164	1.994
0.90	0.252	0.352	0.338	0.452	1.67	0.891	1.667	1.182	2.059
1.00	0.309	0.427	0.414	0.549	1.68	0.904	1.725	1.199	2.128
1.10	0.373	0.514	0.499	0.660	1.69	0.919	1.790	1.219	2.206
1.20	0.444	0.615	0.593	0.789	1.70	0.934	1.865	1.238	2.293
1.30	0.521	0.736	0.696	0.942	1.71	0.950	1.947	1.257	2.384
1.40	0.605	0.885	0.808	1.127	1.72	0.966	2.033	1.278	2.490
1.50	0.698	1.078	0.931	1.363	1.73	0.984	2.137	1.300	2.609
1.51	0.708	1.101	0.943	1.388	1.74	1.002	2.250	1.323	2.744
1.52	0.717	1.125	0.957	1.418	1.75	1.020	2.372	1.347	2.897
1.53	0.727	1.149	0.970	1.447	1.76	1.041	2.530	1.371	3.062
1.54	0.738	1.175	0.984	1.478	1.77	1.062	2.688	1.398	3.261
1.55	0.748	1.201	0.997	1.510	1.78	1.085	2.893	1.427	3.500
1.56	0.759	1.230	1.011	1.543	1.79	1.108	3.117	1.457	3.765
1.57	0.769	1.258	1.025	1.577	1.80	1.133	3.371	1.487	4.074
1.58	0.780	1.288	1.039	1.614	1.85	1.283	5.602	1.674	6.735
1.59	0.791	1.321	1.054	1.652	1.90	1.488	11.200	1.933	13.532
1.60	0.802	1.354	1.069	1.693	1.91	1.536	13.072	1.997	15.854
1.61	0.814	1.392	1.084	1.734	1.92	1.591	15.426	2.066	18.497

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.067	10	0.787	60	1.704	402	1.896	3016	1.974
3	0.131	12	0.983	70	1.730	502	1.909	4022	1.975
4	0.205	15	1.199	80	1.749	603	1.920	5020	1.976
5	0.288	18	1.326	90	1.764	703	1.929	6024	1.978
6	0.378	20	1.383	100	1.778	803	1.935	7029	1.979
7	0.475	30	1.544	151	1.821	1004	1.947	8033	1.980
8	0.577	40	1.622	201	1.846	1508	1.964	9038	1.980
9	0.681	50	1.670	302	1.877	2011	1.973	10042	1.980


60Hz
50Hz
铁损曲线
Core Loss
30RK095 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30RK095

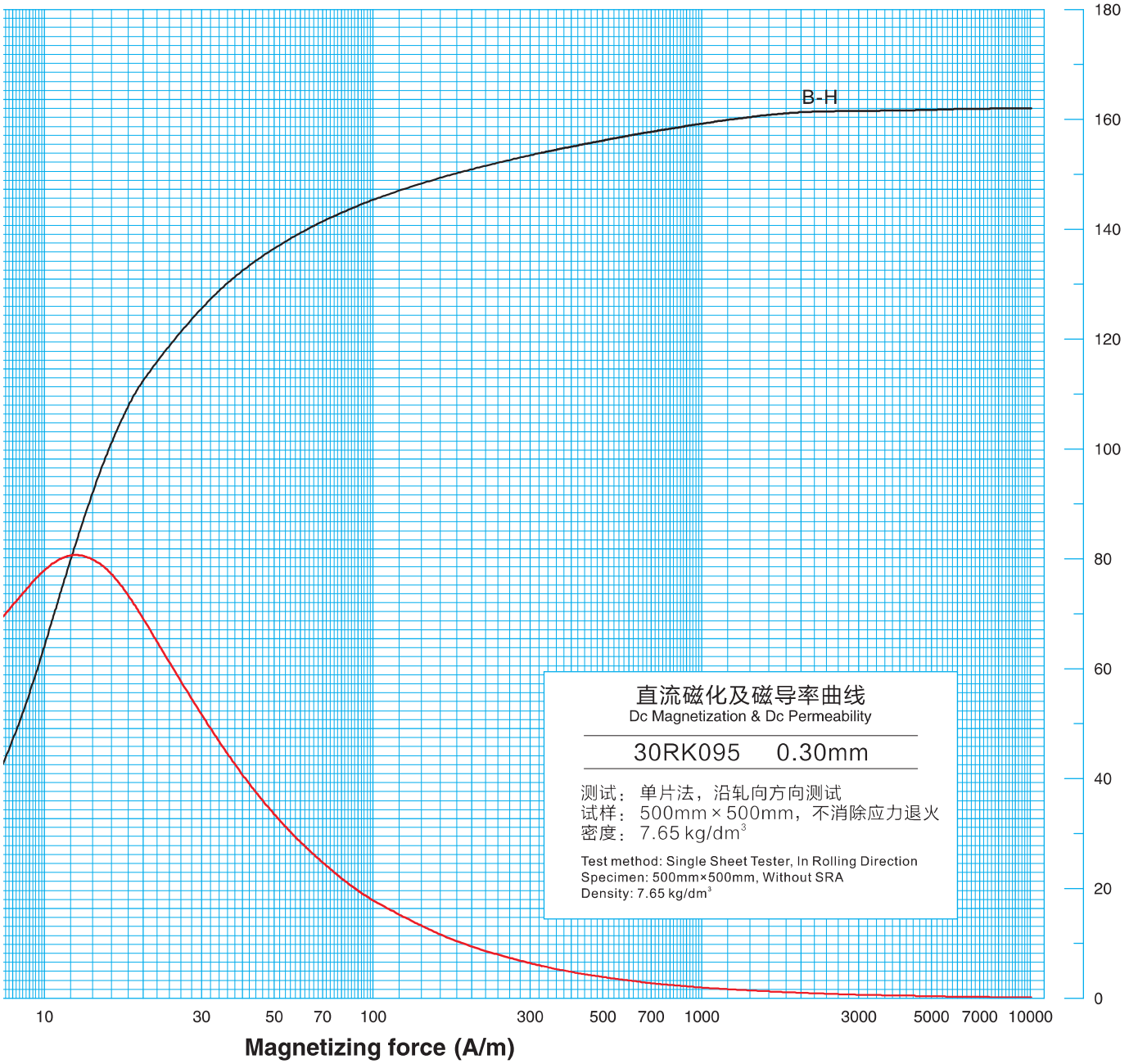


励磁功率曲线
Exciting Power

30RK095　0.30mm

测试：单片法，沿轧向方向测试
试样：500mm × 500mm，不消除应力退火
密度：7.65 kg/dm^3

Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm^3

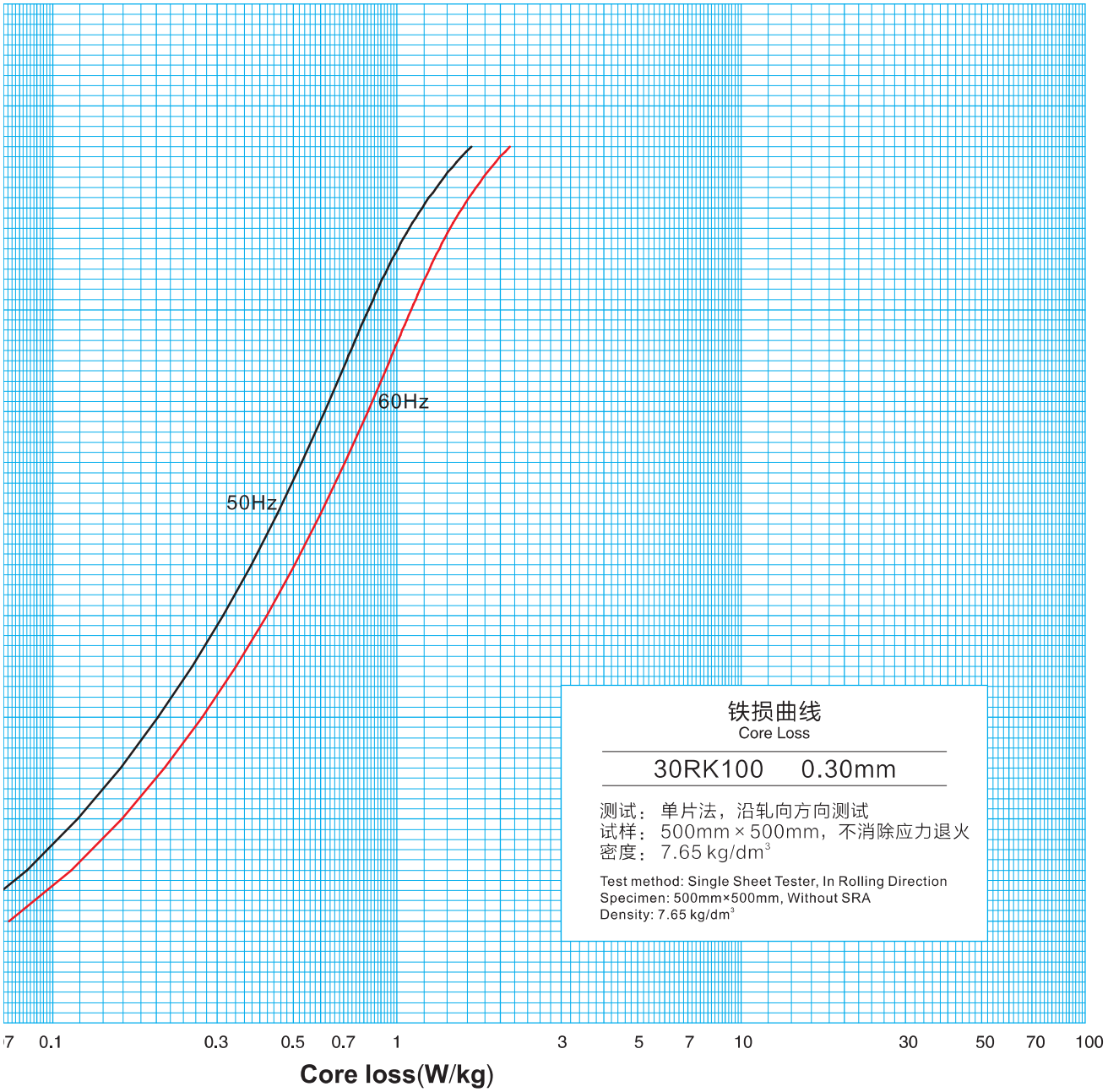

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30RK095 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

30RK095

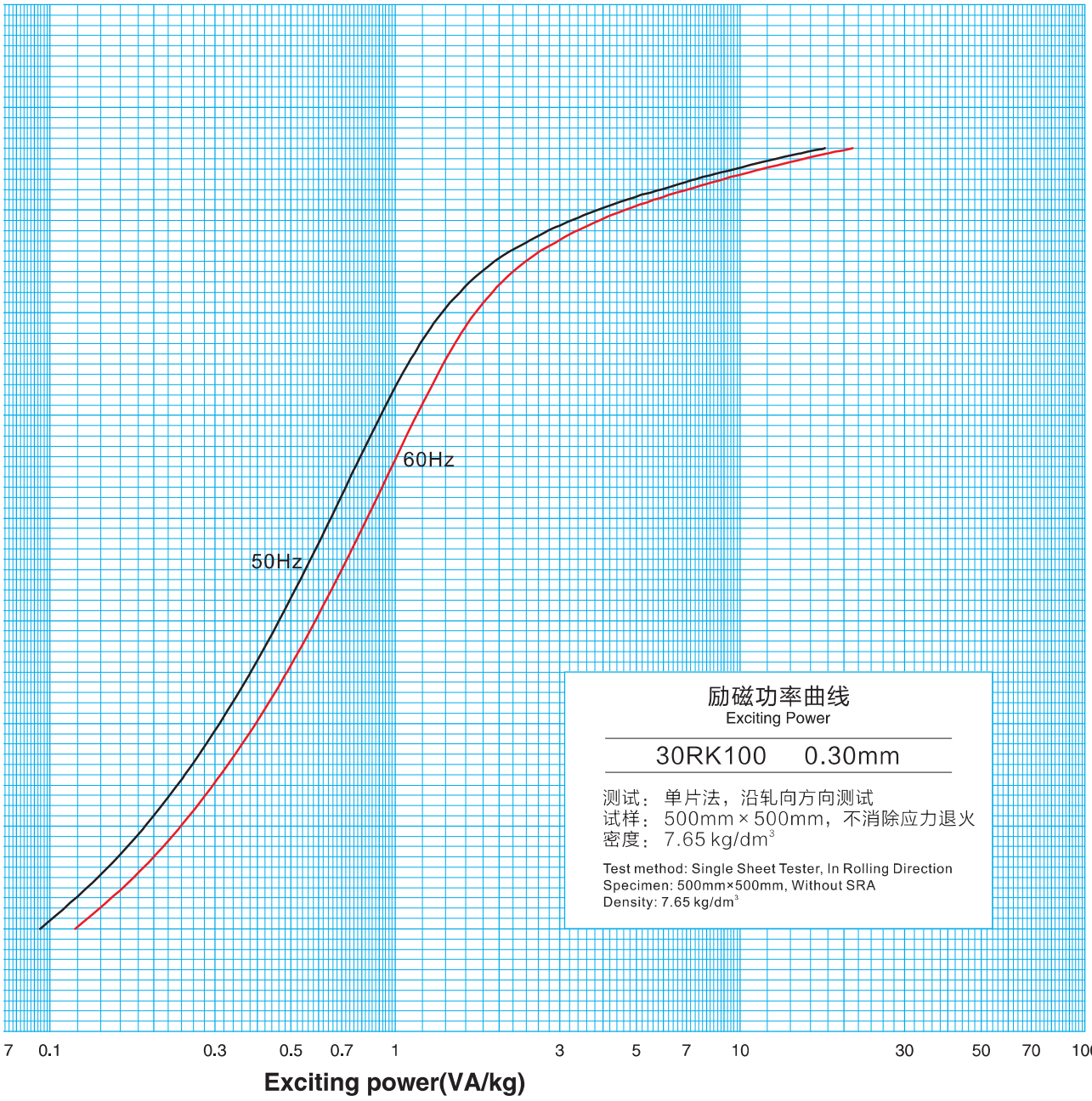
30RK100

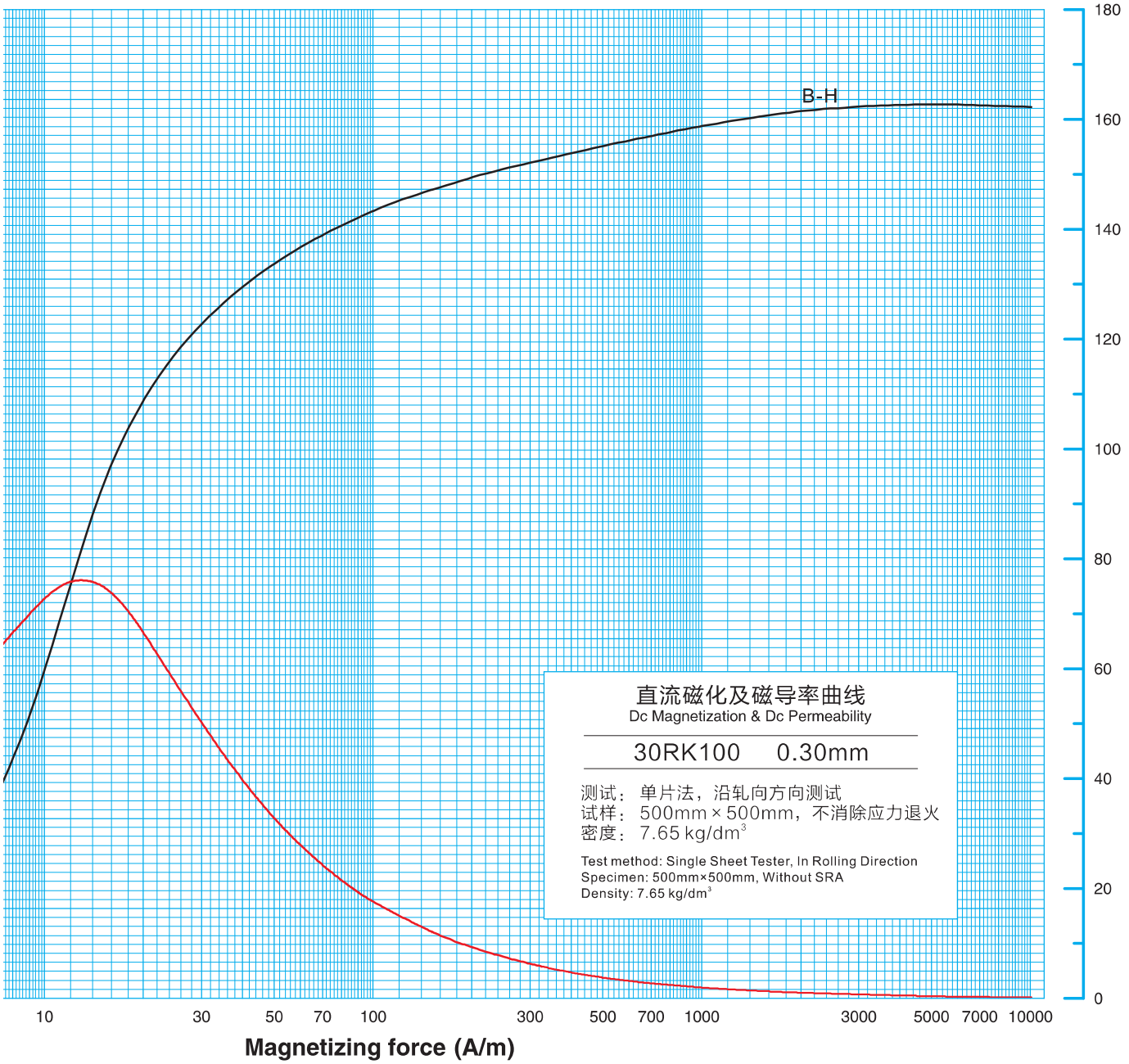
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.055	0.094	0.075	0.118	1.62	0.852	1.446	1.133	1.804
0.50	0.084	0.138	0.113	0.174	1.63	0.866	1.491	1.150	1.855
0.60	0.118	0.188	0.159	0.239	1.64	0.879	1.540	1.167	1.912
0.70	0.157	0.246	0.212	0.312	1.65	0.893	1.590	1.186	1.974
0.80	0.202	0.309	0.272	0.394	1.66	0.907	1.646	1.203	2.039
0.90	0.254	0.381	0.341	0.486	1.67	0.922	1.710	1.223	2.115
1.00	0.312	0.460	0.418	0.587	1.68	0.938	1.782	1.243	2.198
1.10	0.377	0.550	0.505	0.701	1.69	0.954	1.861	1.263	2.291
1.20	0.449	0.651	0.600	0.830	1.70	0.970	1.946	1.284	2.395
1.30	0.528	0.769	0.706	0.979	1.71	0.988	2.043	1.306	2.513
1.40	0.616	0.910	0.823	1.155	1.72	1.006	2.163	1.328	2.638
1.50	0.714	1.091	0.952	1.378	1.73	1.025	2.291	1.351	2.786
1.51	0.724	1.112	0.965	1.403	1.74	1.045	2.435	1.377	2.962
1.52	0.735	1.136	0.980	1.432	1.75	1.065	2.598	1.401	3.147
1.53	0.745	1.159	0.993	1.460	1.76	1.086	2.772	1.428	3.365
1.54	0.756	1.184	1.008	1.491	1.77	1.110	3.000	1.457	3.626
1.55	0.767	1.210	1.023	1.523	1.78	1.133	3.247	1.487	3.915
1.56	0.779	1.239	1.038	1.556	1.79	1.157	3.521	1.517	4.248
1.57	0.790	1.267	1.053	1.592	1.80	1.184	3.866	1.549	4.650
1.58	0.802	1.299	1.068	1.628	1.85	1.336	6.579	1.739	7.873
1.59	0.814	1.332	1.084	1.668	1.90	1.540	12.763	1.994	15.360
1.60	0.827	1.368	1.099	1.709	1.91	1.591	14.910	2.059	17.929
1.61	0.839	1.407	1.116	1.755	1.92	1.627	17.221	2.103	20.501

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.062	10	0.733	60	1.671	402	1.881	3016	1.984
3	0.120	12	0.923	70	1.699	502	1.896	4021	1.988
4	0.188	15	1.142	80	1.719	602	1.908	5019	1.989
5	0.265	18	1.273	90	1.737	703	1.918	6022	1.988
6	0.348	20	1.334	100	1.752	803	1.927	7027	1.987
7	0.440	30	1.502	151	1.799	1004	1.940	8032	1.985
8	0.536	40	1.584	201	1.827	1507	1.962	9036	1.984
9	0.633	50	1.635	302	1.860	2010	1.974	10040	1.983


60Hz
50Hz
铁损曲线
Core Loss
30RK100 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30RK100


60Hz
50Hz
励磁功率曲线
Exciting Power
30RK100 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

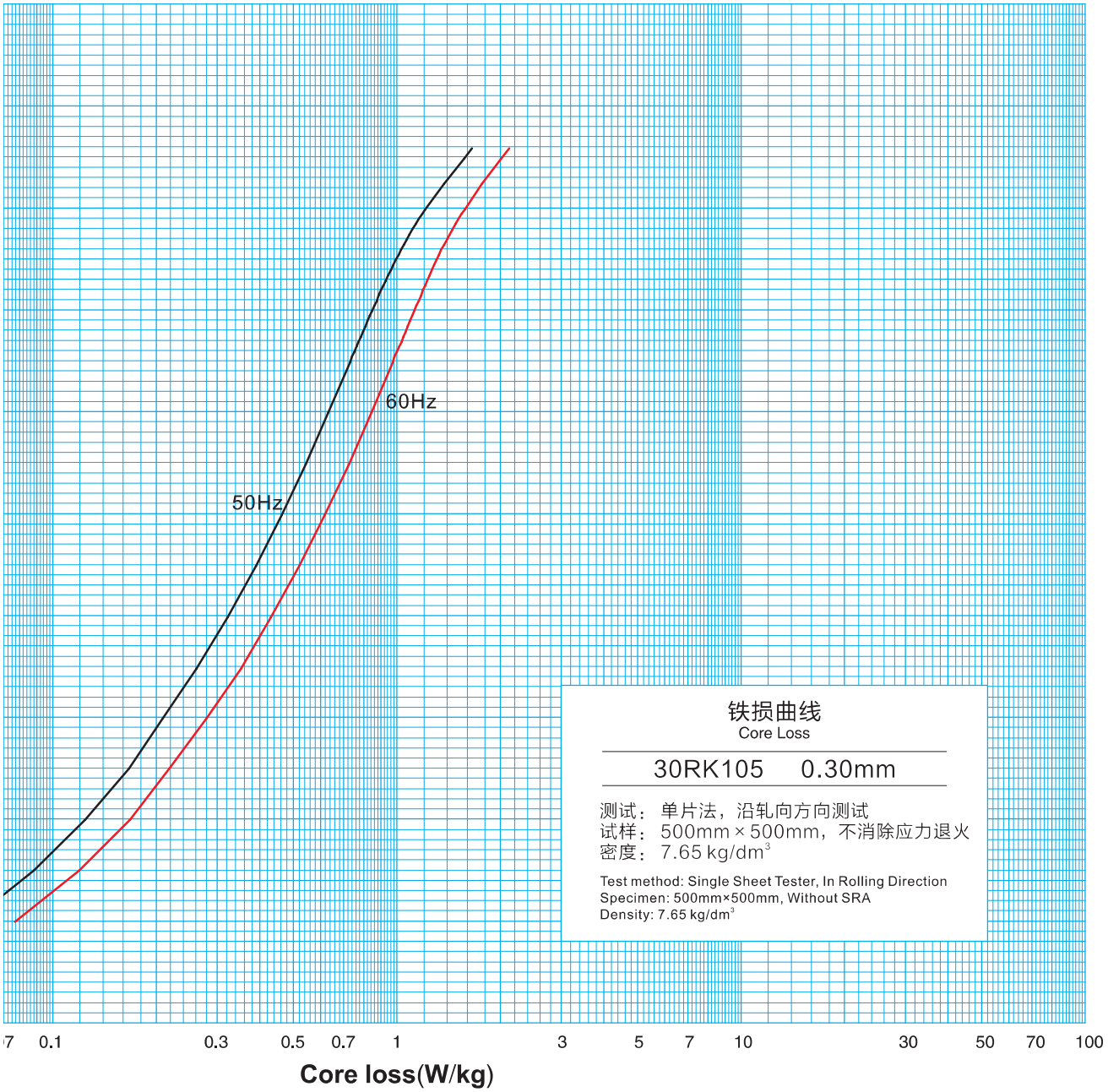

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30RK100 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3

30RK100

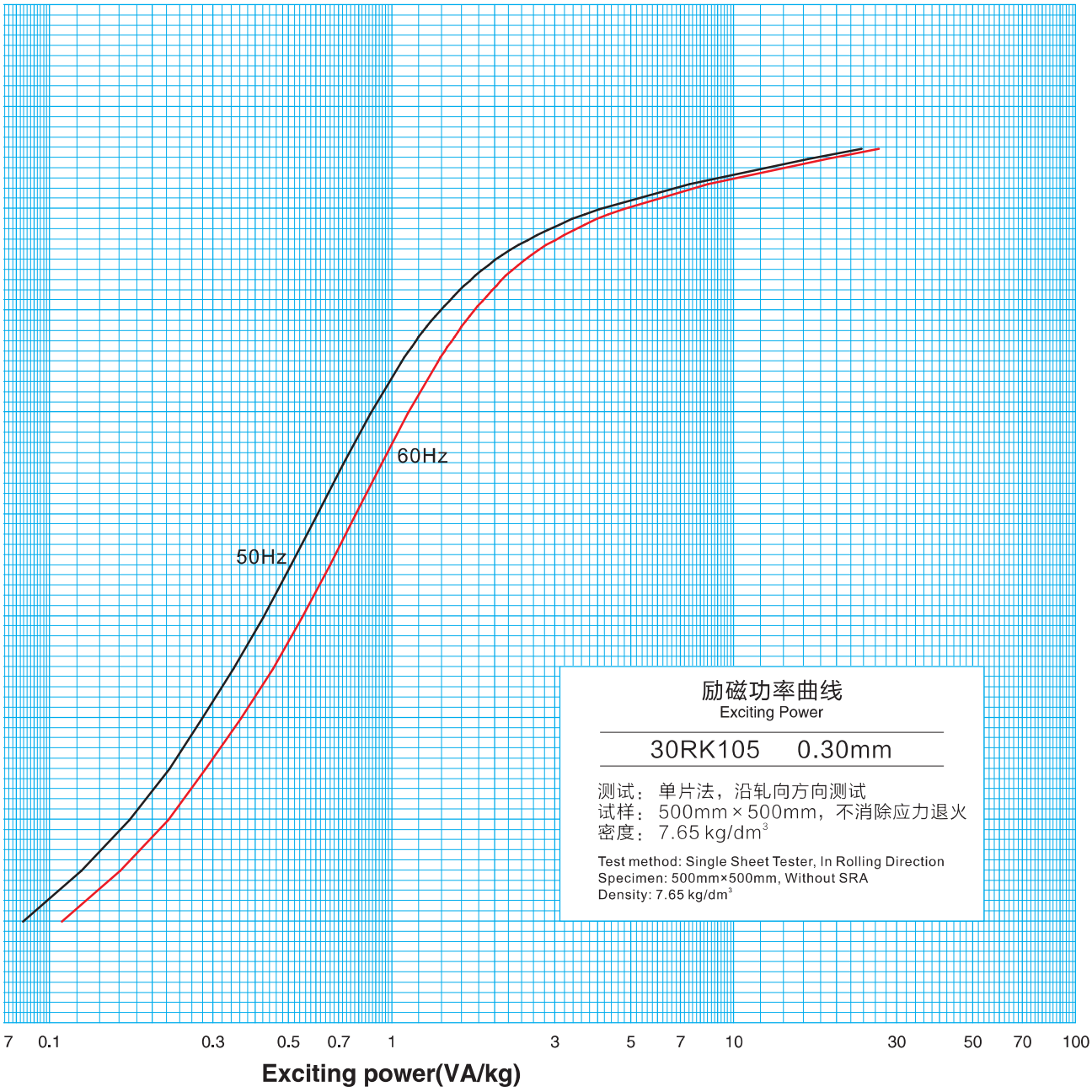
30RK105

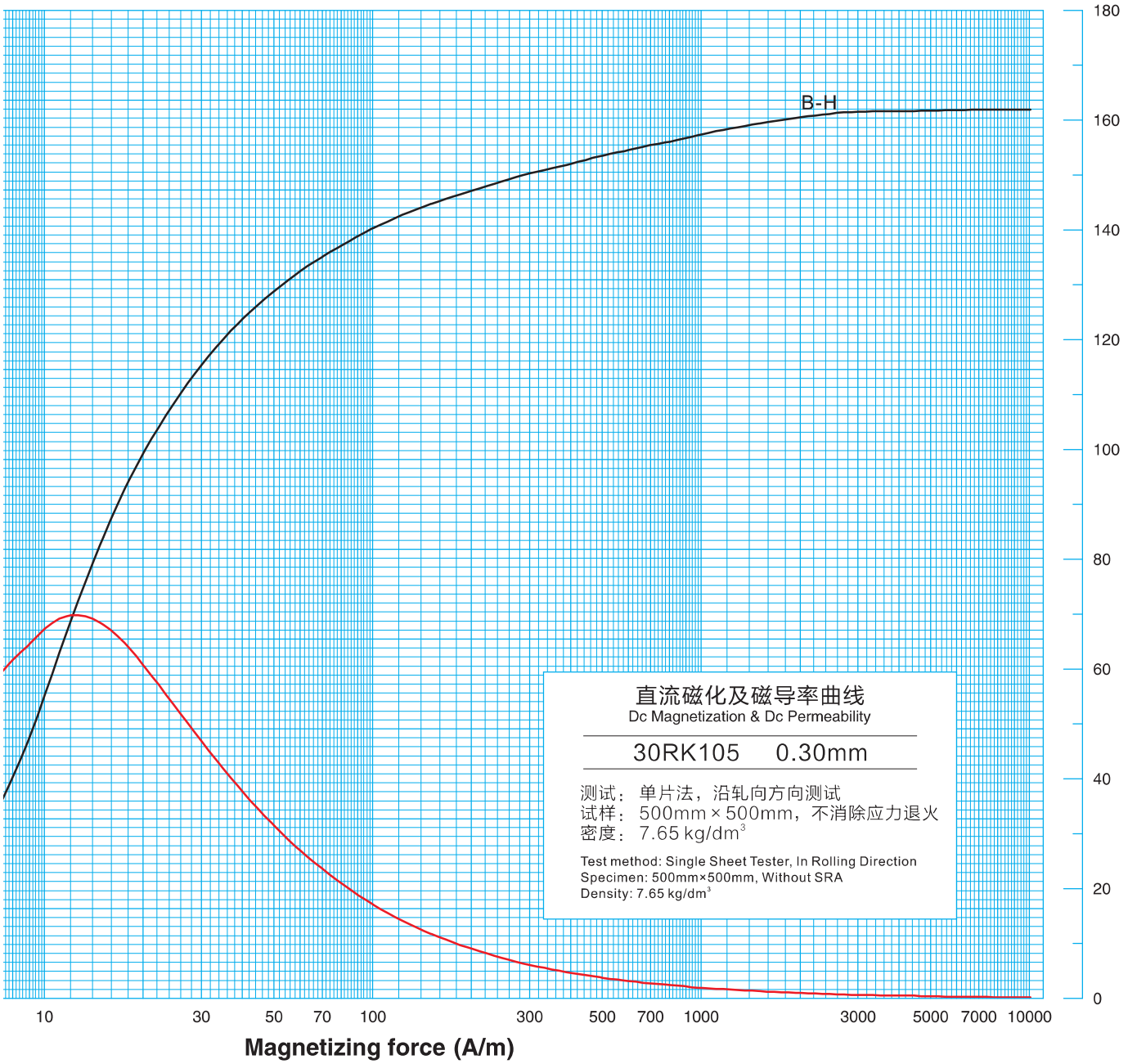
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.057	0.084	0.078	0.109	1.62	0.873	1.473	1.156	1.842
0.50	0.088	0.124	0.119	0.161	1.63	0.886	1.519	1.174	1.901
0.60	0.124	0.171	0.168	0.222	1.64	0.900	1.576	1.192	1.962
0.70	0.167	0.224	0.218	0.286	1.65	0.914	1.628	1.208	2.023
0.80	0.209	0.279	0.280	0.363	1.66	0.929	1.693	1.223	2.082
0.90	0.262	0.345	0.351	0.450	1.67	0.944	1.758	1.242	2.159
1.00	0.323	0.421	0.431	0.547	1.68	0.960	1.836	1.263	2.251
1.10	0.390	0.507	0.520	0.658	1.69	0.976	1.919	1.284	2.349
1.20	0.463	0.605	0.618	0.785	1.70	0.994	2.014	1.305	2.454
1.30	0.544	0.723	0.725	0.934	1.71	1.010	2.109	1.326	2.564
1.40	0.632	0.870	0.842	1.117	1.72	1.028	2.224	1.348	2.690
1.50	0.731	1.067	0.972	1.362	1.73	1.048	2.358	1.371	2.833
1.51	0.741	1.091	0.986	1.392	1.74	1.068	2.505	1.398	3.013
1.52	0.753	1.118	1.000	1.426	1.75	1.087	2.662	1.422	3.188
1.53	0.764	1.145	1.015	1.458	1.76	1.110	2.865	1.451	3.426
1.54	0.775	1.172	1.030	1.493	1.77	1.133	3.097	1.477	3.660
1.55	0.786	1.201	1.045	1.529	1.78	1.158	3.368	1.509	3.971
1.56	0.798	1.233	1.060	1.566	1.79	1.184	3.681	1.540	4.311
1.57	0.810	1.266	1.075	1.604	1.80	1.211	4.044	1.575	4.753
1.58	0.821	1.300	1.090	1.647	1.85	1.374	7.453	1.770	8.430
1.59	0.834	1.341	1.107	1.692	1.90	1.569	16.516	2.017	18.665
1.60	0.846	1.383	1.122	1.736	1.91	1.627	21.569	2.090	24.191
1.61	0.859	1.427	1.140	1.787	1.92	1.652	23.734	2.121	26.559

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.060	10	0.676	60	1.620	402	1.859	3016	1.974
3	0.111	12	0.842	70	1.652	502	1.877	4022	1.975
4	0.171	15	1.027	80	1.676	602	1.889	5019	1.977
5	0.243	18	1.154	90	1.697	703	1.900	6023	1.978
6	0.320	20	1.217	100	1.715	803	1.908	7028	1.979
7	0.407	30	1.411	151	1.769	1004	1.923	8033	1.979
8	0.496	40	1.513	201	1.799	1508	1.948	9036	1.980
9	0.584	50	1.576	302	1.836	2010	1.961	10041	1.980


60Hz
50Hz
铁损曲线
Core Loss
30RK105 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm × 500mm，不消除应力退火
密度：7.65 kg/dm3
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm3
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30RK105


60Hz
50Hz
励磁功率曲线
Exciting Power
30RK105 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)

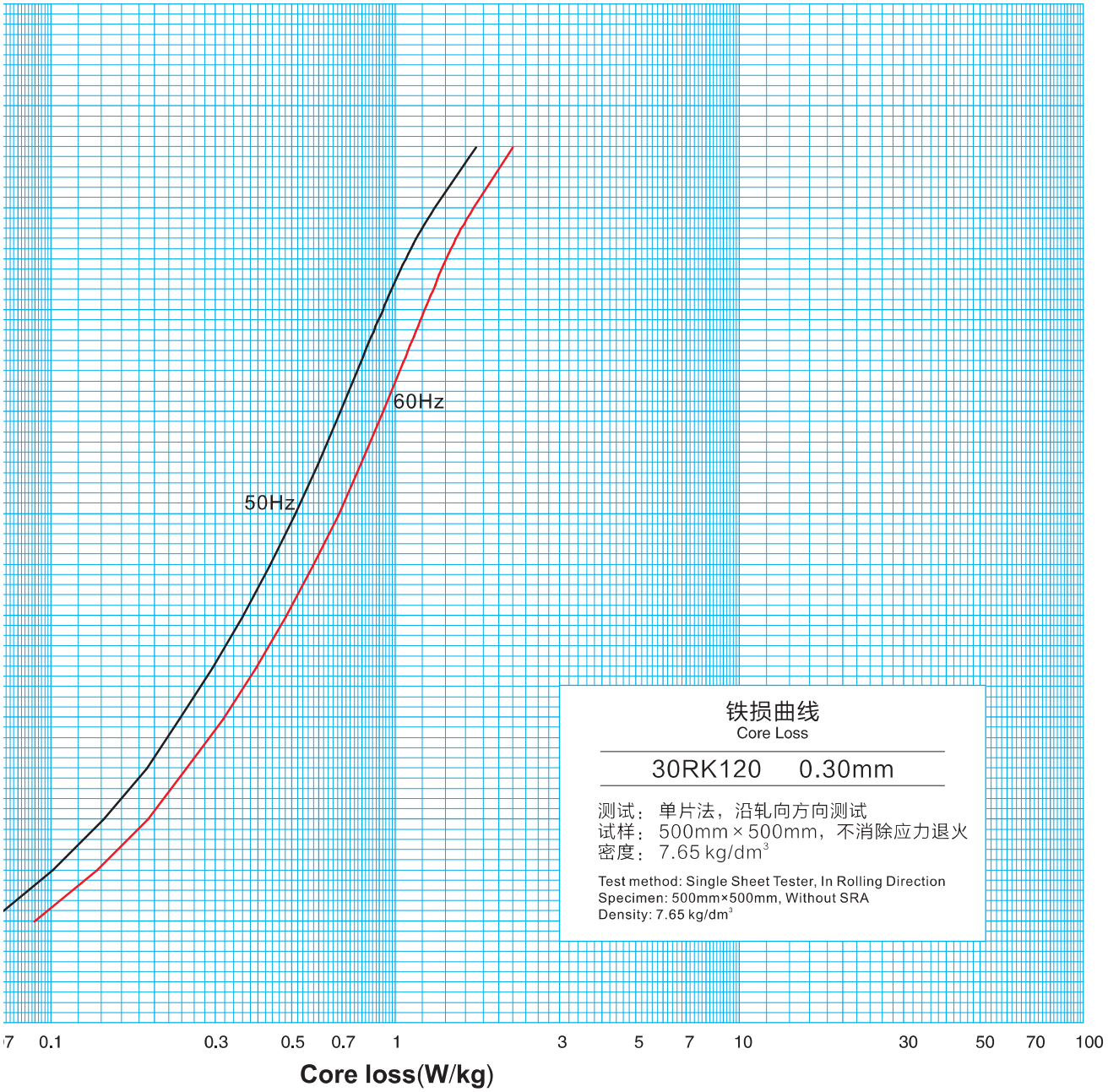

B-H
180
160
140
120
100
80
60
40
20
0
Permeability (mH/m)
10
30
50
70
100
300
500
700
1000
3000
5000
7000
10000
Magnetizing force (A/m)
直流磁化及磁导率曲线
Dc Magnetization & Dc Permeability
30RK105 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³

30RK105

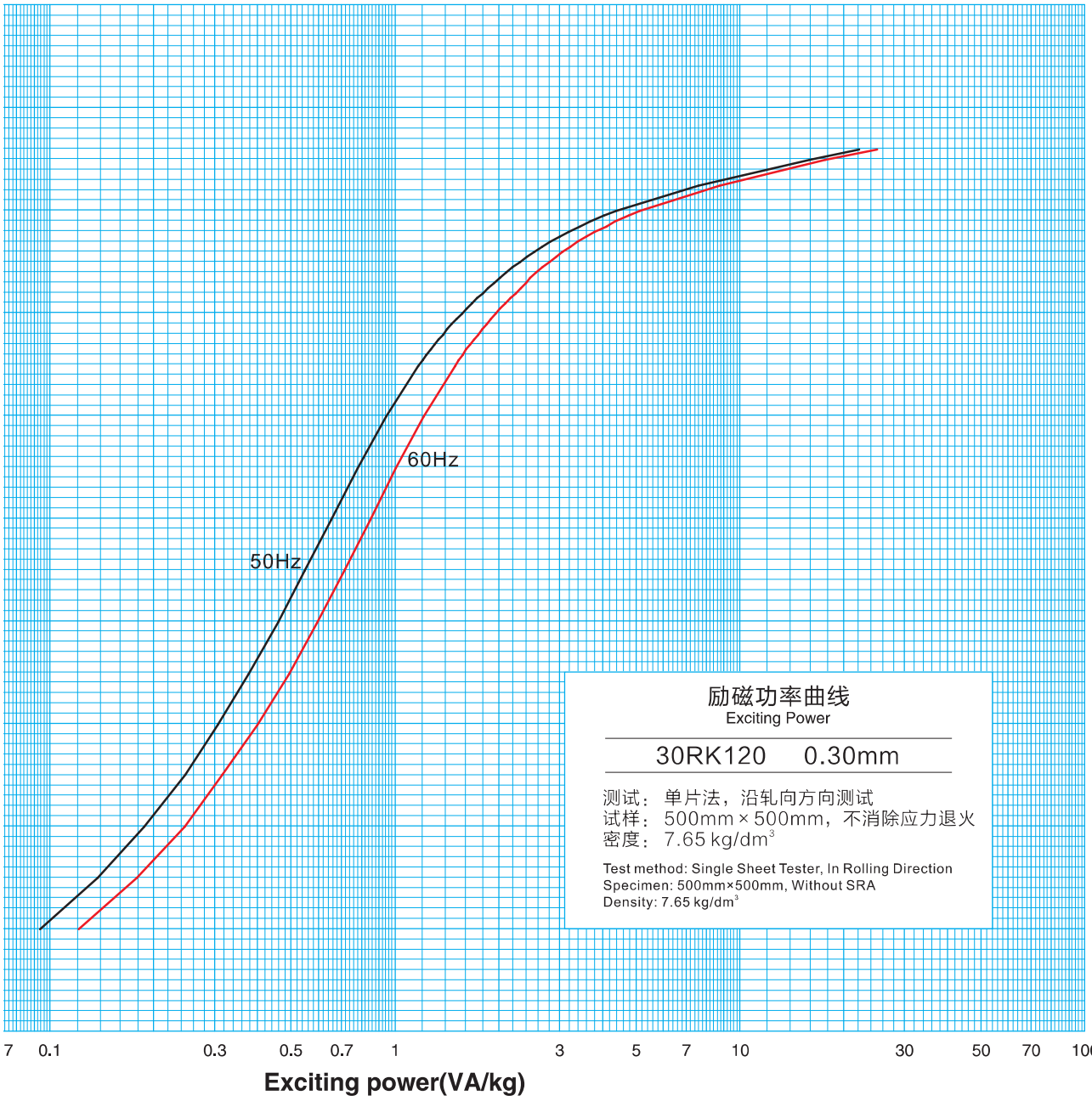
30RK120

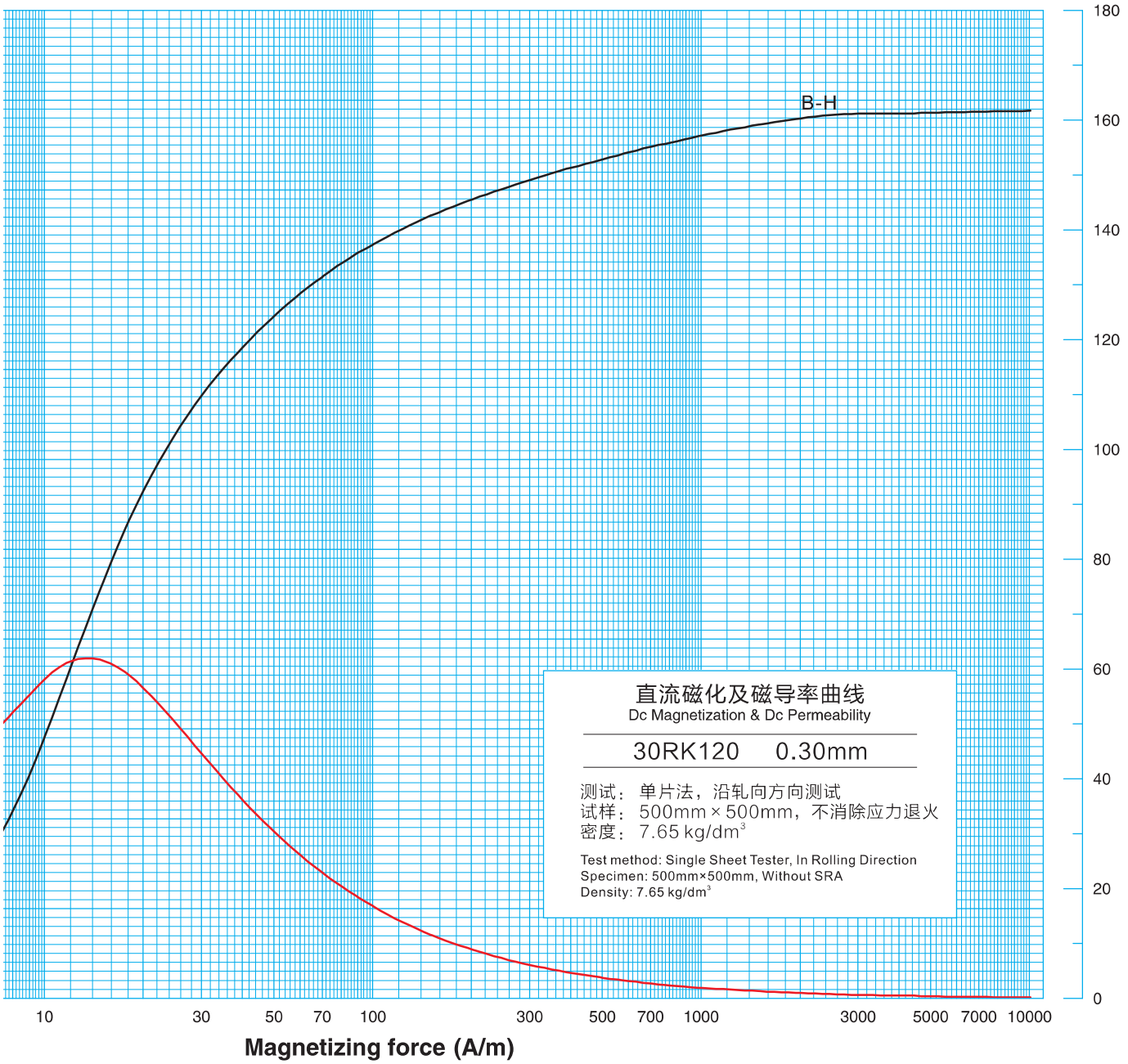
B(T)	50Hz		60Hz		B(T)	50Hz		60Hz	
	P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)		P(W/kg)	S(VA/kg)	P(W/kg)	S(VA/kg)
0.40	0.067	0.093	0.089	0.121	1.62	0.945	1.672	1.251	2.090
0.50	0.101	0.137	0.136	0.179	1.63	0.959	1.731	1.270	2.161
0.60	0.142	0.188	0.191	0.246	1.64	0.974	1.797	1.289	2.239
0.70	0.189	0.247	0.247	0.315	1.65	0.989	1.864	1.307	2.319
0.80	0.236	0.306	0.316	0.399	1.66	1.005	1.940	1.323	2.396
0.90	0.295	0.378	0.395	0.493	1.67	1.020	2.017	1.340	2.469
1.00	0.360	0.458	0.481	0.597	1.68	1.036	2.097	1.360	2.562
1.10	0.433	0.548	0.578	0.715	1.69	1.054	2.198	1.385	2.688
1.20	0.511	0.654	0.683	0.849	1.70	1.072	2.297	1.405	2.795
1.30	0.597	0.780	0.795	1.008	1.71	1.091	2.417	1.430	2.939
1.40	0.691	0.942	0.919	1.210	1.72	1.108	2.529	1.451	3.062
1.50	0.794	1.169	1.056	1.494	1.73	1.129	2.674	1.477	3.227
1.51	0.807	1.203	1.072	1.532	1.74	1.150	2.824	1.500	3.382
1.52	0.818	1.234	1.087	1.569	1.75	1.173	3.013	1.528	3.595
1.53	0.831	1.270	1.102	1.609	1.76	1.194	3.190	1.554	3.801
1.54	0.841	1.302	1.118	1.651	1.77	1.219	3.437	1.588	4.099
1.55	0.854	1.340	1.134	1.696	1.78	1.243	3.681	1.614	4.346
1.56	0.866	1.377	1.150	1.744	1.79	1.272	4.029	1.651	4.755
1.57	0.879	1.417	1.166	1.794	1.80	1.297	4.369	1.683	5.133
1.58	0.892	1.462	1.182	1.846	1.85	1.455	7.582	1.878	8.741
1.59	0.905	1.510	1.198	1.897	1.90	1.639	15.966	2.103	17.722
1.60	0.919	1.565	1.215	1.958	1.91	1.694	20.306	2.172	22.818
1.61	0.932	1.615	1.233	2.020	1.92	1.717	22.166	2.202	25.002

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
2	0.034	10	0.584	60	1.570	402	1.849	3016	1.970
3	0.077	12	0.740	70	1.607	502	1.868	4022	1.971
4	0.130	15	0.927	80	1.637	602	1.884	5020	1.972
5	0.191	18	1.065	90	1.660	703	1.896	6024	1.973
6	0.264	20	1.134	100	1.679	803	1.905	7028	1.974
7	0.340	30	1.343	151	1.743	1004	1.921	8032	1.976
8	0.420	40	1.451	201	1.779	1508	1.945	9037	1.976
9	0.500	50	1.520	302	1.822	2010	1.960	10042	1.977


60Hz
50Hz
铁损曲线
Core Loss
30RK120 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Core loss(W/kg)

30RK120


60Hz
50Hz
励磁功率曲线
Exciting Power
30RK120 0.30mm
测试：单片法，沿轧向方向测试
试样：500mm×500mm，不消除应力退火
密度：7.65 kg/dm³
Test method: Single Sheet Tester, In Rolling Direction
Specimen: 500mm×500mm, Without SRA
Density: 7.65 kg/dm³
7 0.1 0.3 0.5 0.7 1 3 5 7 10 30 50 70 100
Exciting power(VA/kg)



ELECTROMAGNETIC PROPERTY CURVES 电磁性能曲线

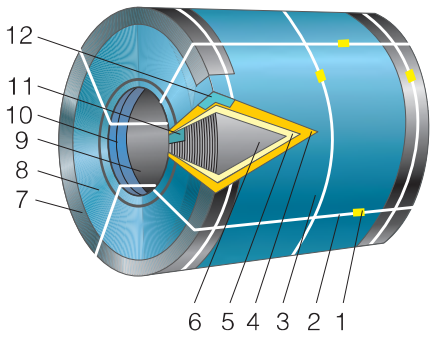
30RK120

产品包装
Product Packing

重量：T<4吨的电工钢带

Weight:T＜4t electrical steel belt

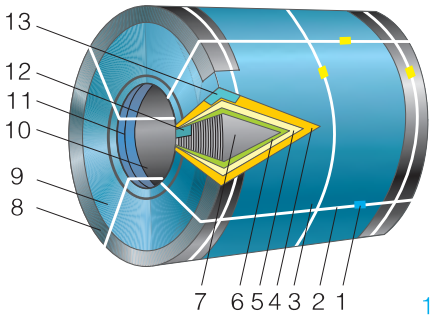
▶ 内、外周专用气相防锈纸：1 层	Internal and external dedicated air anti-corrosion paper: 1 layer
▶ 塑料薄膜套：1 个	Thin plastic film: 1 piece
▶ 内、外周纸护角圈：各1 对	Internal and external paper angle protection: 1 pair respectively
▶ 端盖：1 对	End cover: 1 pair
▶ 内、外周周护板：1 张	Internal and external surrounding protection plate:1 piece
▶ 内、外周金属护角圈：各1 对	Internal and external metal angle protection ring:1 pair respectively



1、锁扣	Lock buckle
2、捆带	Belt
3、金属外周护板	Metal external protection plate
4、塑料薄膜套	Plastic thin film
5、专用气相防锈纸	Dedicated air anti-corrosion paper
6、钢带	Steel belt
7、金属外护角圈	Metal external angle protection ring
8、端盖	End cover
9、内周护板	Internal surrounding protection plate
10、金属内护角圈	Metal internal protection angle ring
11、纸内护角圈	Paper internal protection angle ring
12、纸外护角圈	Paper external protection angle ring

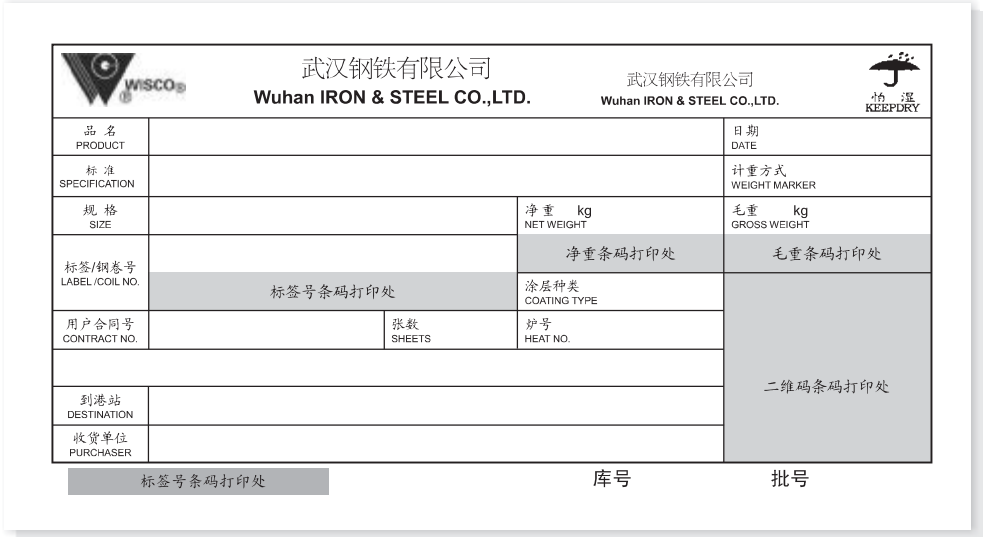
重量：T≥4吨的电工钢带
Weight :T≥4t electrical steel belt

▶ 内、外周专用气相防锈纸：1 层	Internal and external dedicated air anti-corrosion paper: 1 layer
▶ 外周缓冲板：1 张	External buffering plate: 1 piece
▶ 内、外周纸护角圈：各1 对	Internal and external paper angle protection: 1 pair respectively
▶ 端盖：1 对	End cover: 1 pair
▶ 内、外周周护板：1张	Internal and external surrounding protection plate:1 piece
▶ 内、外周金属护角圈：各1 对	Internal and external metal angle protection ring: 1 pair respectively
▶ 塑料薄膜套：1 个	Thin plastic film: 1 piece



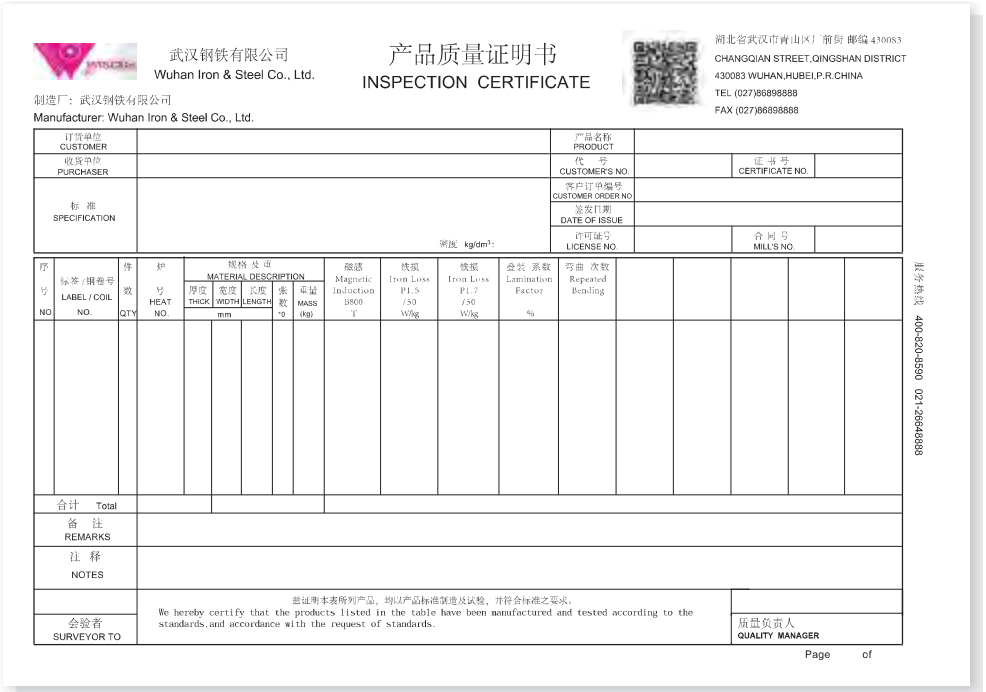
1、锁扣	Lock buckle
2、捆带	Belt
3、金属外周护板	Metal external protection plate
4、外周缓冲板	External buffering plate
5、塑料薄膜套	Plastic thin film
6、专用气相防锈纸	Dedicated air anti-corrosion paper
7、钢带	Steel belt
8、金属外护角圈	Metal external angle protection ring
9、端盖	End cover
10、内周护板	Internal surrounding protection plate
11、金属内护角圈	Metal internal protection angle ring
12、纸内护角圈	Paper internal protection angle ring
13、纸外护角圈	Paper external protection angle ring

产品标签
Product Labeling



武汉钢铁有限公司 Wuhan IRON & STEEL CO.,LTD.		武汉钢铁有限公司 Wuhan IRON & STEEL CO.,LTD.	KEEPDRY 怡湿
品 名 PRODUCT			日期 DATE
标 准 SPECIFICATION			计重方式 WEIGHT MARKER
规 格 SIZE		净 重 kg NET WEIGHT	毛重 kg GROSS WEIGHT
标签/钢卷号 LABEL /COIL NO.		净重条码打印处	毛重条码打印处
	标签号条码打印处	涂层种类 COATING TYPE	二维码条码打印处
用户合同号 CONTRACT NO.	张数 SHEETS	炉号 HEAT NO.	
到港站 DESTINATION			
收货单位 PURCHASER			
标签号条码打印处		库号	批号

产品质量证明书
Inspection Certificate



武汉钢铁有限公司
Wuhan Iron & Steel Co., Ltd.

产品质量证明书
INSPECTION CERTIFICATE

湖北省武汉市青山区厂前街 邮编 430083
CHANGQIAN STREET,QINGSHAN DISTRICT
430083 WUHAN,HUBEI,P.R.CHINA
TEL (027)86898888
FAX (027)86898888

制造厂：武汉钢铁有限公司
Manufacturer: Wuhan Iron & Steel Co., Ltd.

订货单位 CUSTOMER		产品名称 PRODUCT	
收货单位 PURCHASER		代 号 CUSTOMER'S NO.	证书号 CERTIFICATE NO.
标 准 SPECIFICATION		客户订单编号 CUSTOMER ORDER NO.	
	密度 kg/dm³:	签发日期 DATE OF ISSUE	
		许可证号 LICENSE NO.	合同号 MILL'S NO.

序号 NO.	标签/钢卷号 LABEL / COIL NO.	件数 QTY	炉号 HEAT NO.	规格及重 MATERIAL DESCRIPTION 厚度 THICK	宽度 WIDTH	长度 LENGTH (mm)	张数 *0	重量 MASS (kg)	磁感 Magnetic Induction B800 T	铁损 Iron Loss P1.5 /50 W/kg	铁损 Iron Loss P1.7 /50 W/kg	叠装系数 Lamination Factor %	弯曲次数 Repeated Bending					
合计 Total																		
备 注 REMARKS																		
注 释 NOTES																		

兹证明本表所列产品，均以产品标准制造及试验，并符合标准之要求。
We hereby certify that the products listed in the table have been manufactured and tested according to the standards,and accordance with the request of standards.

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常用单位及换算表

Units Commonly Used and Conversion Table

单位 Units	初值 Multiply		倍数 by	结果 to obtain	
磁场强度 Magnetizing Force	奥斯特	Oersted(Oe)	7.985×10	安培/米	Ampere per meter(A/m)
	奥斯特	Oersted(Oe)	2.021	安培/英寸	Ampere per inch(A/in)
	安培/米	Ampere per meter(A/m)	1.257×10^{-2}	奥斯特	Oersted(Oe)
	安培/米	Ampere per meter(A/m)	2.540×10^{-2}	安培/英寸	Ampere per inch(A/in)
	安培/英寸	Ampere per inch(A/in)	4.947×10^{-1}	奥斯特	Oersted(Oe)
	安培/英寸	Ampere per inch(A/in)	3.937×10	安培/米	Ampere per meter(A/m)
	安培/厘米	Ampere per centimeter(A/cm)	10^2	安培/米	Ampere per meter(A/m)
磁感 Magnetic Induction	特斯拉	Tesla(T)	10^4	高斯	Gauss(Gs)
	特斯拉	Tesla(T)	1	韦伯/平方米	Weber per square meter(Wb/m^2)
	高斯	Gauss(Gs)	10^{-4}	韦伯/平方米	Weber per square meter(Wb/m^2)
	高斯	Gauss(Gs)	6.452	磁通量/平方英寸	Lines per square inch ($Line/in^2$)
	韦伯/平方米	Weber per square meter(Wb/m^2)	10^4	高斯	Gauss(Gs)
	韦伯/平方米	Weber per square meter(Wb/m^2)	1	特斯拉	Tesla(T)
	韦伯/平方米	Weber per square meter(Wb/m^2)	6.452×10^4	磁通量/平方英寸	Lines per square inch ($Line/in^2$)
	磁通量/平方英寸	Lines per square inch ($Line/in^2$)	1.550×10^{-1}	高斯	Gauss(Gs)
	磁通量/平方英寸	Lines per square inch ($Line/in^2$)	1.550×10^{-5}	韦伯/平方米	Weber per square meter(Wb/m^2)
铁损 Core Loss	瓦特/千克	Watt per kilogram(W/kg)	4.536×10^{-1}	瓦特/磅	Watt per pound(w/lb)
	瓦特/磅	Watt per pound(W/lb)	2.204	瓦特/千克	Watt per kilogram(W/kg)
磁导率 Permeability	CGS电磁单位	CGS electro-magnetic unit(emu)	1	高斯/奥斯特	Gauss per Oersted(G/Oe)
	CGS电磁单位	CGS electro-magnetic unit(emu)	1.257×10^{-6}	亨利/米	Henry per meter(H/m)
	CGS电磁单位	CGS electro-magnetic unit(emu)	1.257×10^{-6}	韦伯/安培-米	Weber per Ampere-meter(Wb/A-m)
	CGS电磁单位	CGS electro-magnetic unit(emu)	3.192×10^{-8}	韦伯/安培-英寸	Weber per Ampere-inch(Wb/A-in)
	CGS电磁单位	CGS electro-magnetic unit(emu)	3.192	磁通量/安培-英寸	Lines per Ampere-inch(Wb/A-in)
	亨利/米	Henry per meter(H/m)	7.958×10^5	CGS电磁单位	CGS electro-magnetic unit(emu)
	亨利/米	Henry per meter(H/m)	7.958×10^5	高斯/奥斯特	Gauss per Oersted(Gs/Oe)
	亨利/米	Henry per meter(H/m)	2.540×10^{-2}	韦伯/安培-英寸	Weber per Ampere-inch(Wb/A-in)
	亨利/米	Henry per meter(H/m)	2.540×10^6	磁通量/安培-英寸	Lines per Ampere-inch(Wb/A-in)
长度 Length	米	Meter(m)	3.937×10	英寸	Inch(in)
	英寸	Inch(in)	2.540×10^{-2}	米	Meter(m)
	米	Meter(m)	3.281	英尺	Feet(ft)
	英尺	Feet(ft)	3.048×10^{-1}	米	Meter(m)
重量 Weight	千克	Kilogram(kg)	2.204	磅	Pound(lb)
	磅	Pound(lb)	4.536×10^{-1}	千克	Kilogram(kg)

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2018.03 印刷于中国武汉/Printed IN Wuhan China