Constant Voltage Driver 恒压驱动

Model/型号:KAEHXXXS0024NRXX

Model 型号	Rated Input Voltage 输入电压	Input Power 输入功率	Input Current 输入电流	PF 功率因数	Output Power Range 输出功率范围	Output Voltage 输出电压	Output Current 输出电流	Efficiency 效率	Cementing product 灌胶工艺
KAEH030S0024NR14	220-240VAC	≤38W	≤0.19A	≥0.95	0-30W	24V	0-1.25A	≥85%	否
KAEH060S0024NR14		≤72W	≤0.35A		0-60W		0-2.5A	≥86%	是
KAEH100S0024NR15		≤115W	≤0.6A		0-100W		0-4.17A	≥92%	否
KAEH150S0024NR15		≤168W	≤0.9A		0-150W		0-6.25A	≥93%	是
KAEH250S0024NR16		≤275W	≤1.5A		0-250W		0-10.42A	≥93%	是

*** Test result @230V, 50Hz, Full Load. 所有测试参数基于@230V, 50Hz, 满载。**

*** Recommended minimum power is 10% load. 建议最小使用功率为 10 %总功率。**

1. Parameters 参数表

category 类别	Item 项目	Technical Norm 技术指标
Features 特性	Output Type 输出类型	Constant Voltage 恒压
	Dimming Type 调光类型	N/A
	Output Features 输出特性	Isolation 隔离
	IP Grade IP 防护等级	IP20
	Insulation Class 绝缘等级	Class II (Suitable for Class I and Class II Luminaires) II 类（适用于 I 类和 II 类灯具
Input 输入	Rated Input Voltage 额定输入电压	220-240VAC
	Range of AC Input Voltage 交流输入电压范围	176-264VAC
	Range of DC Input Voltage 直流输入电压范围	175-280VDC
	Frequency 频率	Rate:50/60Hz, Range:47~63Hz
	Power Factor 功率因数	≥0.95, 220-240VAC, Rated Load, see graphs
	THD 谐波	≤7% 230VAC，Rated Load, see graphs
	Standby Power Consumption 待机功耗	≤0.5W, @230VAC,Dim to OFF
Output 输出	Output Voltage 输出电压	24VDC+3%
	No load Voltage 空载电压	24VDC+5%

	Output Voltage Ripple 输出电压纹波	30W			<480mVPK-PK (1%)
		60W/100W/150W/250W			<240mVPK-PK (0.5%)
	Line Regulation 线性调整率	±1%			
	Load Regulation 负载调整率	±2%			
	Overshoot 过冲	<105%Vo (<110%Vo, only for 30W)			
	Start-up Time 启动时间	≤0.5S (220-240VAC)			
	Hold-up time & Turn off time (Typical) 典型保持时间和关机时间	Model	Hold-up time(mS)	Turn-off time(mS)	230VAC, LED Rated Load, Hold-up time measure from AC input turn-off to output voltage drop to 90%, turn-off time measure from AC input turn-off to output voltage drop to 10%
		30W	6.8	800	
		60W	22.8	62.8	
		100W	9.2	69.6	
		150W	10	384	
		250W	16.2	676	
	Efficiency 效率	30W	≥84%	85% typ.	230VAC, Rated Load, at output terminals, see graphs
		60W	≥85%	86% typ.	
		100W	≥91%	92% typ.	
		150W	≥91%	93% typ.	
		250W	≥91%	93% typ.	
Protection 保护	Short Circuit Protection 短路保护	Auto Recovery			
	Over Current Protection 过流保护	120%-180%Io, Auto Recovery			
	Over Voltage Protection 过压保护	110%-150%Vo, Auto Recovery			
	Over Temperature Protection 过温保护	90<Tc<110℃, Auto Recovery(only for 100W/150W/250W)			
	Insulation voltage 绝缘电压	I/P to O/P,3.75KVac/5mA/1min			
	Insulation resistance 绝缘电阻	>100M ohm @ 500VDC			
	Leakage current 漏电流	I/P to O/P < 250μA			
Environment 环境	Ta/Operation Temperature 工作环境温度	-25….+45℃			
	Ts/Storage Temperature 储存温度	-40….+85℃			
	Tc/Enclosure Temperature 外壳温度	30W/60W		80℃	
		100W/150W/250W		90℃	
	Humidity 湿度	5%....85%RH			
	Atmosphere 大气压强	86-108KPa			
Construction 装配	Connection Method 连接方法	Terminal			
	Cable Terminals 电缆接头数量	Input		1 terminal block(300V 10A)	
		Output	30W/60W	1 terminal block(300V 10A)	
			100W/150W/250W	2terminals block(min.150V 10A)	
	Installation 安装方式	Independent 独立式			
	Input Wire Cross Section 输入电缆横截面积	0.75mm²-1.5 mm²			

	Output Wire Cross Section 输出电缆横截面积	30W		1*0.5mm²-1.5 mm²
		60W		1*0.75mm²-1.5 mm²
		100W/150W		2*0.75mm²-1.0 mm²
		250W		2*0.75mm²-1.5 mm²
	Cable stripping lengths 电缆剥线长度	6mm		
	Output Cable Length 输出电缆长度	Max. 3M		
	Cable diameters range 电缆直径范围	Input		2.2-4mm or 9.5-10.5mm
		Output & Dimming		2.2-4mm
	Dimension 尺寸	30W/60W		300*30*16mm (L*W*H)
		100W/150W		350*30*18mm (L*W*H)
		250W		400*40*22mm (L*W*H)
Standards 标准	Certification 证书	CE,CB, ENEC, SAA，CCC		
	Safety Standards 安全标准	EN61347-1:2015,EN61347-2-13:2014/A1:2017 EN62384:2006/A1:2009 AS61347.2.13:2018,AS/NZS 61347.1:2016 Inc A1		
	EMC Standards EMC 电磁兼容标准	EN IEC 55015:2019,EN IEC 55015:2019/A11:2019 EN IEC 61000-3-2:2019,EN61547:2009, EN 61000-3-3:2013/A1:2019		
	Performance 性能	EN62384		
	Surge 雷击浪涌	L-N:2KV		
Others 其它	RoHS 环保	2011/65/EU		
	MTBF 平均无故障时间	≥250KHours,Ta=25℃(MIL-HDBK-217F)		
	Life Time 寿命	30W	≥80K Hrs	@230VAC , full load, see graphs. End of Life: Failure Rate<10%.
		60W	≥65K Hrs	
		100W	≥60K Hrs	
		150W	≥55K Hrs	
		250W	≥52K Hrs	
	Warranty 质保	5years		
	Noise 噪音	≤24dB@Background noise ≤18dB ，Interval≥15cm		

Remark:

All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.所有参数无特别说明，均在输入电压 230VAC/50Hz 和 25℃的环境温度下测得。

Terminal wiring must be operated with a suitable screwdriver.After installation, check to make sure that the terminals cannot be pressed against the wire sheath.端子打线必须采用合适的螺丝刀操作，安装完后要检查，确保端子不能压到线皮

3. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.LED 电源作为整灯中的一个零部件与终端设备结合使用，因 EMC 性能受 LED 灯具以及走线的影响，终端设备制造商需对整套装置重新进行 EMC 确认。

4. Output ripple should be measured at the output end which has with 0.1uF/50V ceramic capacitance and 47uF/50V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.输出电压纹波测试时，应该在输出端并联 0.1uF/50V 的陶瓷电容和 47uF/50V 的铝电解电容，示波器使用 20MHz 带宽。

2. Connected quantities of different current Breaker 不同电流断路器的连接数量

TYPE 类型	KAEH030S0024NR14 Connected quantities of different current Breaker 不同电流断路器的连接数量						Input Voltage 输入电压	Inrush Current 浪涌电流	Time 时间
	current（A）	10	13	16	20	25			
	Installation wire diameter安装线径	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		7	10	12	15	18	@230VAC	82	0.8us
TYPE C		12	15	19	23	29			
TYPE D		19	24	30	37	47			

TYPE 类型	KAEH060S0024NR14 Connected quantities of different current Breaker 不同电流断路器的连接数量						Input Voltage 输入电压	Inrush Current 浪涌电流	Time 时间
	current（A）	10	13	16	20	25			
	Installation wire diameter安装线径	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		23	30	37	46	58	@230VAC	26	220us
TYPE C		37	48	59	74	92			
TYPE D		59	77	95	118	148			

TYPE 类型	KAEH100S0024NR15 Connected quantities of different current Breaker 不同电流断路器的连接数量						Input Voltage 输入电压	Inrush Current 浪涌电流	Time 时间
	current（A）	10	13	16	20	25			
	Installation wire diameter安装线径	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		13	17	21	27	33	@230VAC	45	250us
TYPE C		21	28	34	43	53			
TYPE D		34	44	55	68	85			

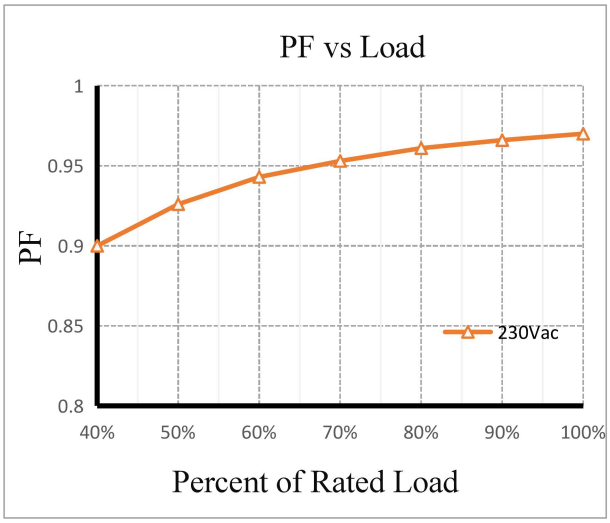
TYPE 类型	KAEH150S0024NR15 Connected quantities of different current Breaker 不同电流断路器的连接数量						Input Voltage 输入电压	Inrush Current 浪涌电流	Time 时间
	current（A）	10	13	16	20	25			
	Installation wire diameter安装线径	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		11	14	17	21	27	@230VAC	56	185us
TYPE C		17	22	27	34	43			
TYPE D		27	36	44	55	69			

TYPE 类型	KAEH250S0024NR16 Connected quantities of different current Breaker 不同电流断路器的连接数量						Input Voltage 输入电压	Inrush Current 浪涌电流	Time 时间
	current（A）	10	13	16	20	25			
	Installation wire diameter安装线径	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		8	10	13	16	20	@230VAC	76	310us
TYPE C		13	16	20	25	32			
TYPE D		20	26	32	40	51			

3. Graph 曲线图

PF VS LOAD Curve功率因数-负载曲线图

30W



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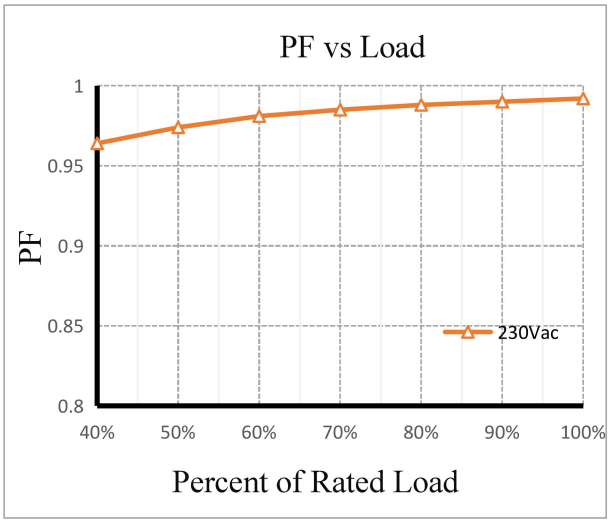

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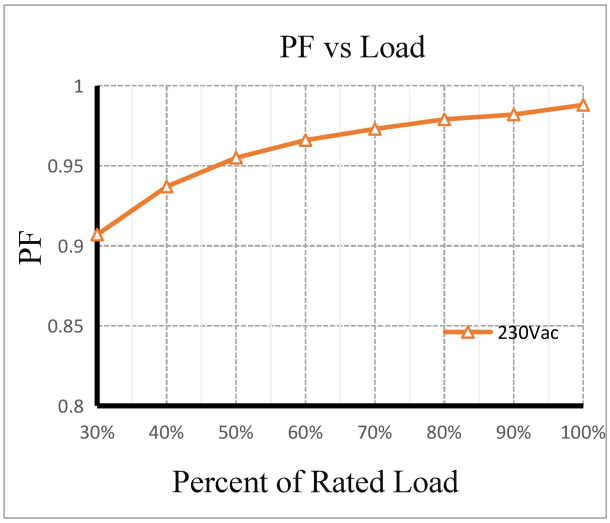

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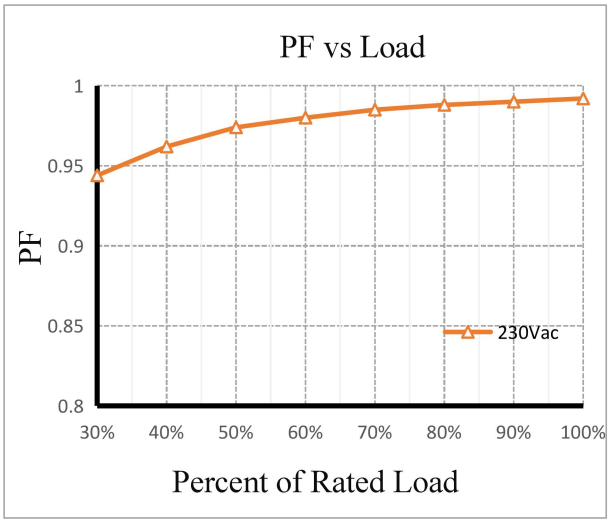

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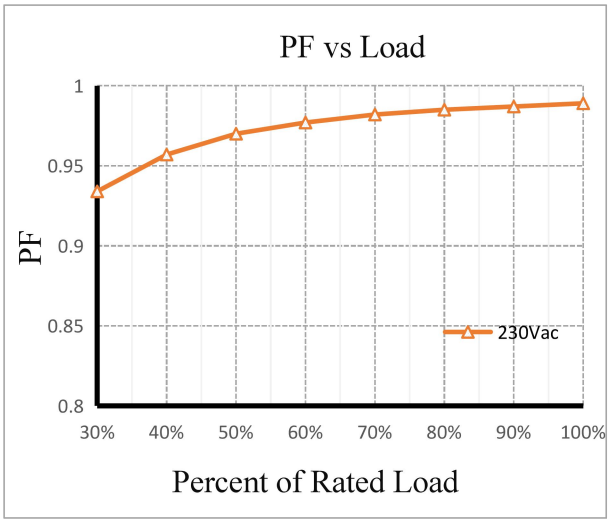
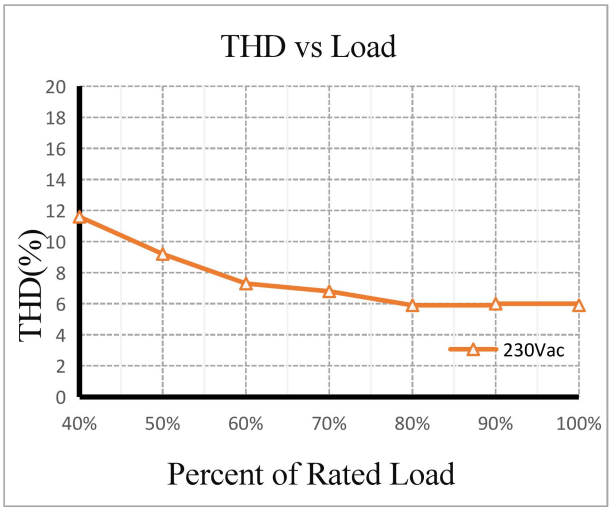


THD VS LOAD Curve 谐波-负载曲线图

30W



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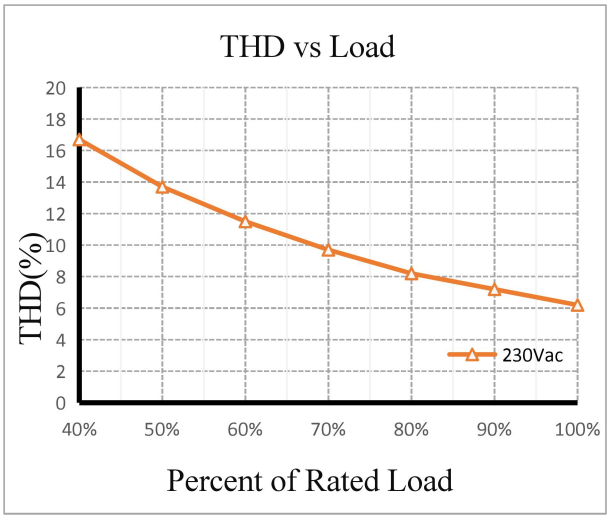

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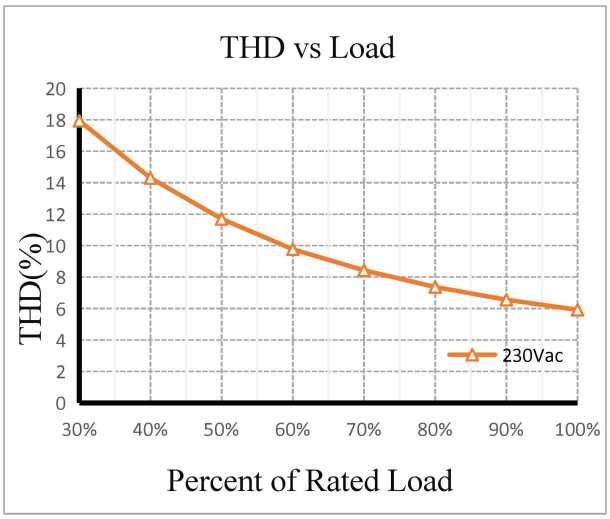

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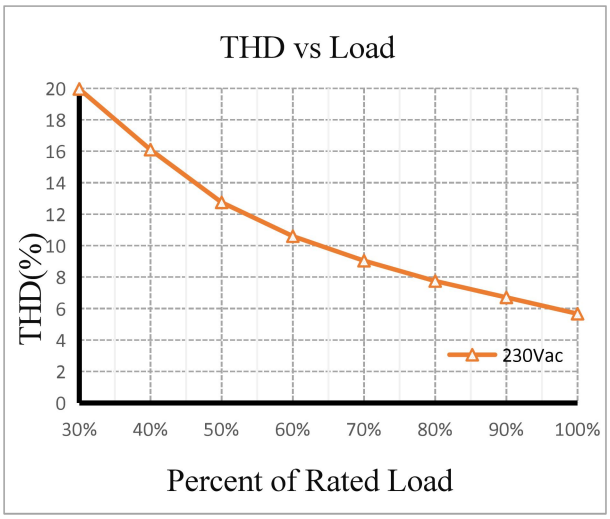

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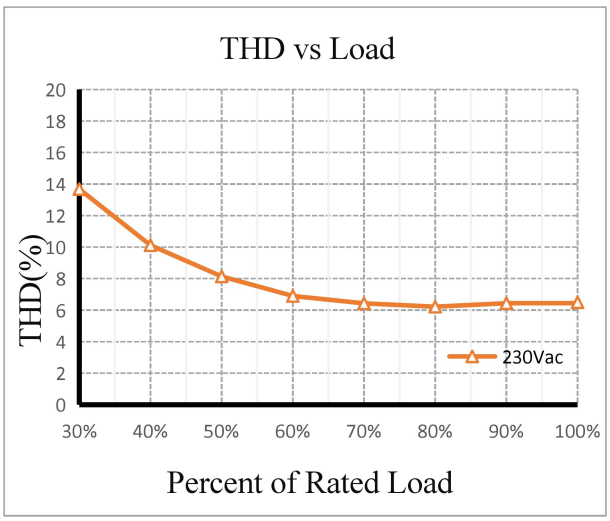

Efficiency VS LOAD Curve效率-负载曲线图

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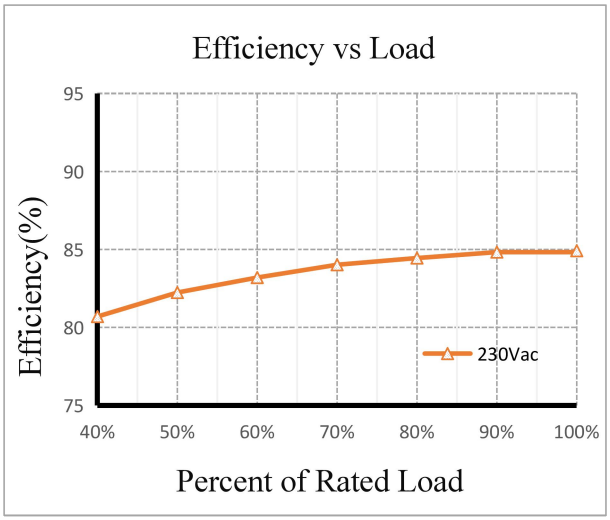

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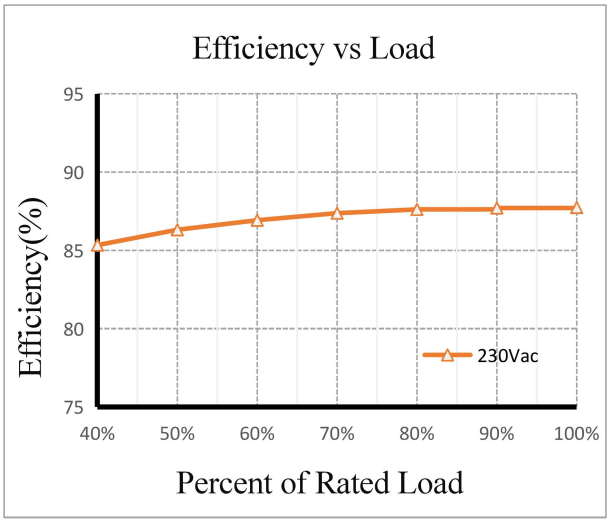

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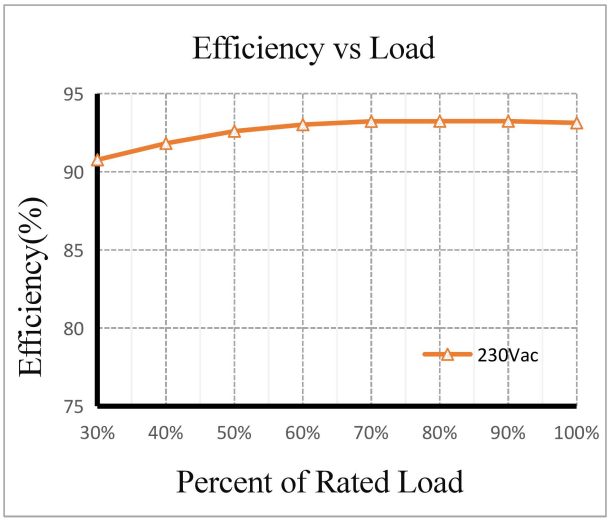

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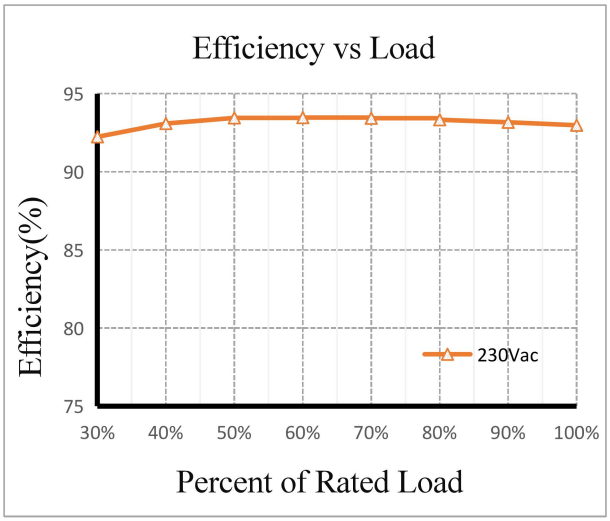

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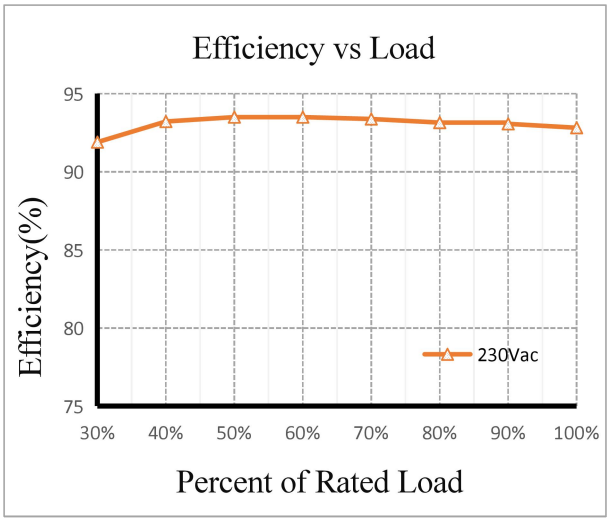
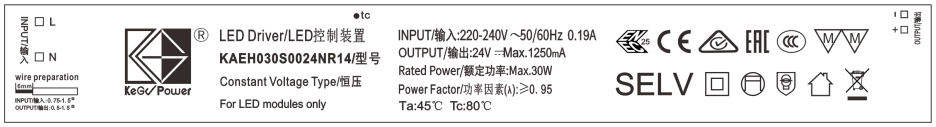


4. Label 标签


INPUT/输入
L
N
wire preparation
6mm
INPUT/输入:0.75-1.5
OUTPUT/输出:0.5-1.5
KeGu Power
LED Driver/LED控制装置
KAEH030S0024NR14/型号
Constant Voltage Type/恒压
For LED modules only
INPUT/输入:220-240V ~50/60Hz 0.19A
OUTPUT/输出:24V ⎓Max.1250mA
Rated Power/额定功率:Max.30W
Power Factor/功率因素(λ):≥0. 95
Ta:45℃ Tc:80℃
SELV
OUTPUT/输出

INPUT/输入
L
N
wire preparation
6mm
INPUT/输入:0.75-1.5
OUTPUT/输出:0.75-1.5
KeGu Power
LED Driver/LED控制装置
KAEH060S0024NR14/型号
Constant Voltage Type/恒压
For LED modules only
INPUT/输入:220-240V ~50/60Hz 0.35A
OUTPUT/输出:24V ⎓Max.2500mA
Rated Power/额定功率:Max.60W
Power Factor/功率因素(λ):≥0. 95
Ta:45℃ Tc:80℃
SELV
OUTPUT/输出

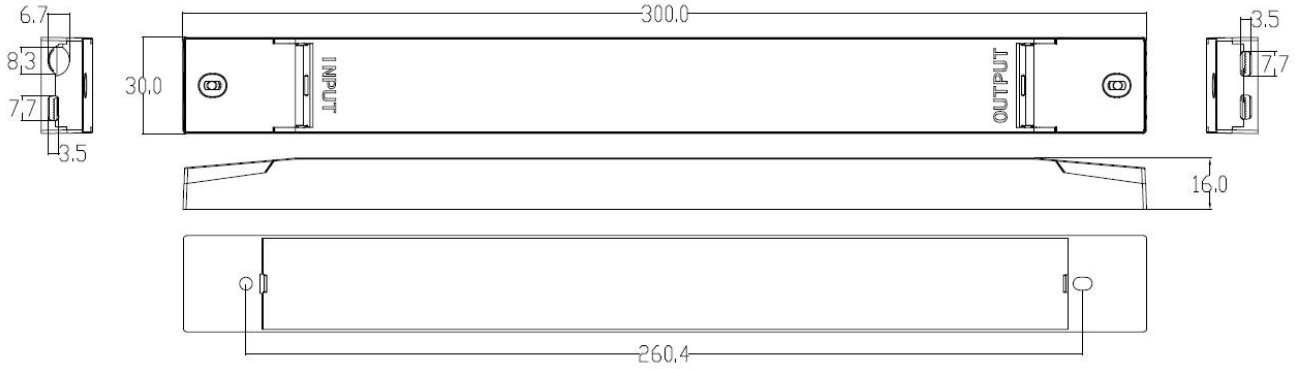
INPUT/输入
L
N
wire preparation
6mm
INPUT/输入:0.75-1.5
OUTPUT/输出:0.75-1.5
KeGu Power
LED Driver/LED控制装置
KAEH100S0024NR15/型号
Constant Voltage Type/恒压
For LED modules only
INPUT/输入:220-240V～50/60Hz 0.6A
OUTPUT/输出:24V ⎓Max.4170mA
Rated Power/额定功率:Max.100W
Power Factor/功率因素(λ):≥0. 95
Ta:45℃ Tc:90℃
SELV
LED-
LED+
OUTPUT
输出

INPUT/输入
L
N
wire preparation
6mm
INPUT/输入:0.75-1.5
OUTPUT/输出:0.75-1.5
KeGu Power
LED Driver/LED控制装置
KAEH150S0024NR15/型号
Constant Voltage Type/恒压
For LED modules only
INPUT/输入:220-240V～50/60Hz 0.9A
OUTPUT/输出:24V ⎓Max.6250mA
Rated Power/额定功率:Max.150W
Power Factor/功率因素(λ):≥0. 95
Ta:45℃ Tc:90℃
SELV
LED-
LED+
OUTPUT
输出

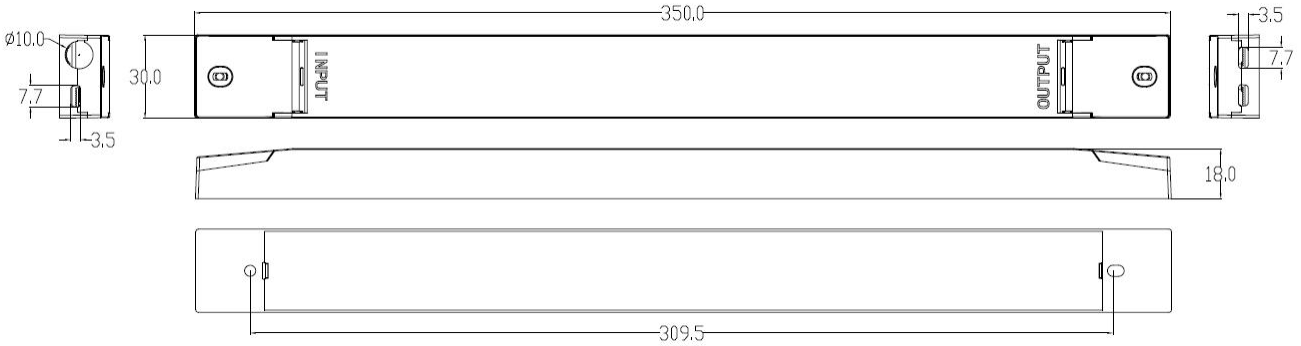
INPUT/输入
L
N
wire preparation
6mm
INPUT/输入:0.75-1.5
OUTPUT/输出:0.75-1.5
KeGu Power
LED Driver/LED控制装置
KAEH250S0024NR16/型号
Constant Voltage Type/恒压
For LED modules only
INPUT/输入:220-240V～50/60Hz 1.5A
OUTPUT/输出:24V ⎓Max.10420mA
Rated Power/额定功率:Max.250W
Power Factor/功率因素(λ):≥0. 95
Ta:45℃ Tc:90℃
SELV
LED-
LED+
OUTPUT/输出

5. Dimension （Unit：mm）尺寸

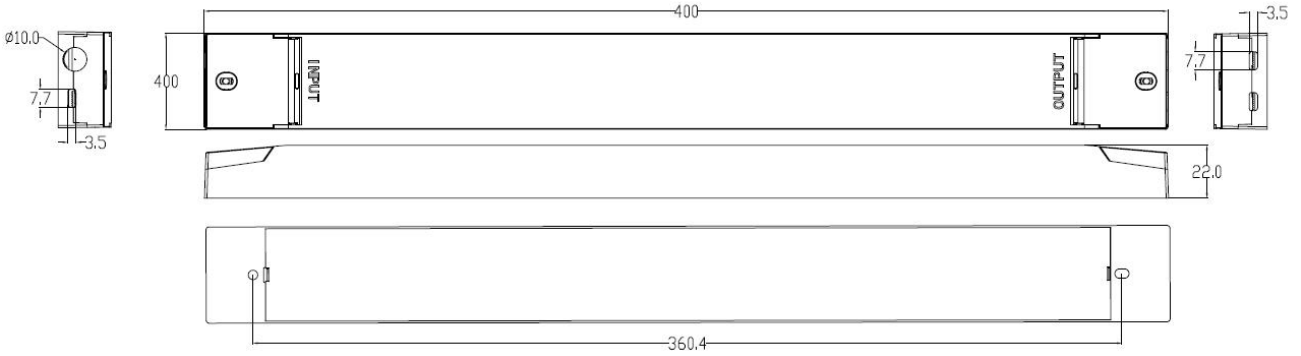
KAEH030S0024NR14 &KAEH060S0024NR14:



KAEH100S0024NR15 & KAEH150S0024NR15:



KAEH250S0024NR16:



6. Packing information 包装信息

Packing way 包装方式	Model 型号	Carton L*W*H(mm) 纸箱尺寸	Pcs/Carton 数量/箱	Net weight/ Pcs(kg) 净重/台	Net weight/ Carton(kg) 净重/箱	Gross weight / Carton(kg) 毛重/箱
With white box and manual 白盒包装	KAEH030S0024NR14	450*240*200	45	0.143	6.435	6.956
	KAEH060S0024NR14	450*240*200	45	0.232	10.44	10.96
	KAEH100S0024NR15	450*240*200	35	0.202	7.07	7.59
	KAEH150S0024NR15	450*240*200	35	0.298	10.43	10.95
	KAEH250S0024NR16	410*270*190	20	0.518	10.36	10.88
Without white box and manual 工业包装	KAEH030S0024NR14	450*240*200	75	0.125	9.375	9.975
	KAEH060S0024NR14	450*240*200	75	0.214	16.05	16.65
	KAEH100S0024NR15	450*240*200	70	0.184	12.88	13.48
	KAEH150S0024NR15	450*240*200	70	0.28	19.6	20.2
	KAEH250S0024NR16	410*270*190	40	0.5	20	20.6

7. Wiring instructions 接线说明

• All connections must be kept as short as possible to ensure good EMI behaviour
所有的连接线尽可能的短，以保证良好的 EMI

• Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
电源线应和驱动器以及其他连接线保持一定的距离（建议 5-10cm）

• Advice the maximum length of output wires is 3 m
建议输出线的最大长度不超过 3m

• Secondary switching is not permitted（Except for constant voltage）
不允许二次侧开关（恒压除外）

• Incorrect wiring can damage LED modules.
错误的布线会损坏 LED 模组

• The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)
防止线路电线对地短路。（尖锐的金属零件、金属电缆夹、百叶窗等）

8. REVISION HISTORY 修订历史

DATE	REV.	REMARK
2020-05-27	V0.01	Initial release.
2021-08-10	V0.02	Add the wiring instructions（添加接线说明）
2022-06-02	V0.03	Add circuit breaker table（添加断路器表）