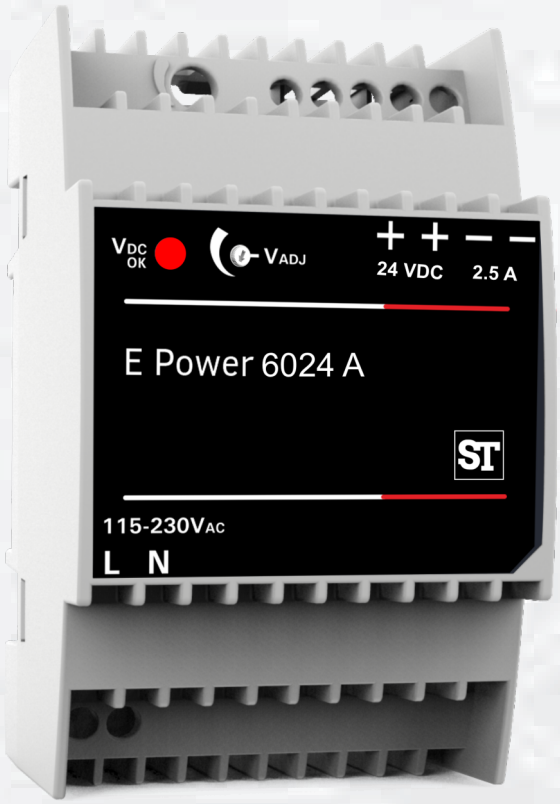
Technical Data Sheet

E POWER 60XXA

Switched Mode Power Supply



E Power 60XXA is a compact 60 W DIN rail mounting power supply designed to provide reliable DC power with a universal input range of 85–264 VAC or 120–370 VDC. Featuring high efficiency up to 87%, adjustable output voltage, Class II isolation, and comprehensive protection functions, it is an ideal solution for industrial automation, process control, and building automation applications.

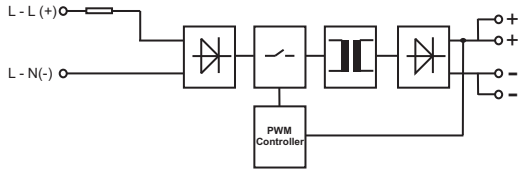
Special Features

- Universal AC Input range 85-264 V
- Universal DC Input range 120-370 V
- High Efficiency UPTO 87%
- Isolation Class-II
- Suitable For Indoor Use
- DIN Rail Mounting
- Extremely Compact Plastic Enclosure
- Cooling by Free Air Convection

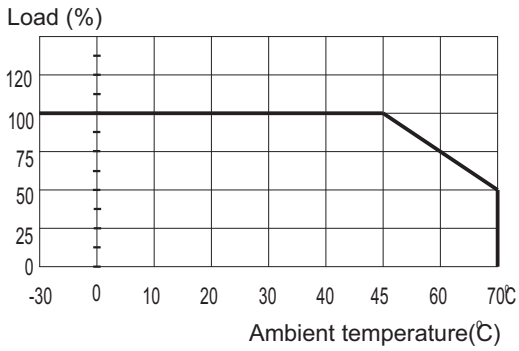
Technical Specifications (cont.)

Input Data	
AC input voltage range	85 VAC...264 VAC (Refer Derating Curve)
DC input voltage range	120 VDC ... 370 VDC
Nominal input voltage	115 VAC / 230 VAC (165 VDC / 325 VDC)
Inrush current	≤ 36A typical
AC frequency range	45 Hz....65Hz
Input current	1.4 A (115 VAC) , 0.8 A (230 VAC)
Internal fuse	T4 A
External fuse (recommended)	10A (MCB curve B)
Output Data	
Nominal Output Voltage	See Table 1
Adjustment range	See Table 1
Rated current	See Table 1
Power boost current @ 60°C	See Table 1
Holdup time	≥ 30 msec (230 VAC), 15 msec (115 VAC)
Line regulation	< ± 0.5 %
LOAD regulation	< ± 0.5 % (change in load, static 10% ... 90%)
Overload	105...160% rated output power
Dissipation power load max	8.9 W
Efficiency	> 87 %
Residual ripple Note 3	≤ 150 mVpp
Short circuit protection	Yes
Overload protection	Yes (Hiccup mode)
Overvoltage output protection	Yes (See Table 1)
Parallel connection	No
Series connection	YES
Turn on Delay	1 Seconds
Rise time	50 msec
Resistance to reverse feed	See Table 1

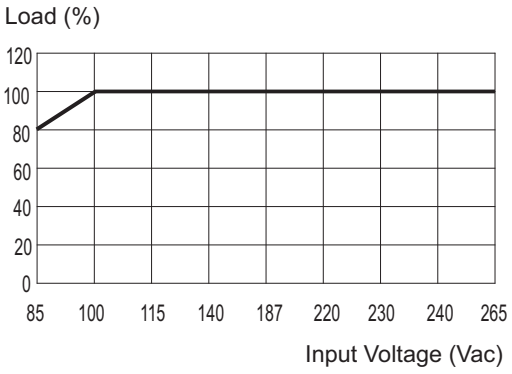
Block Diagram



Temperature derating curve



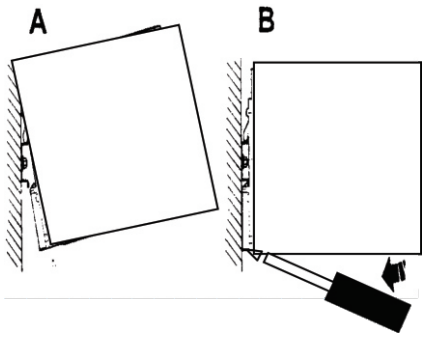
Input Voltage derating curve



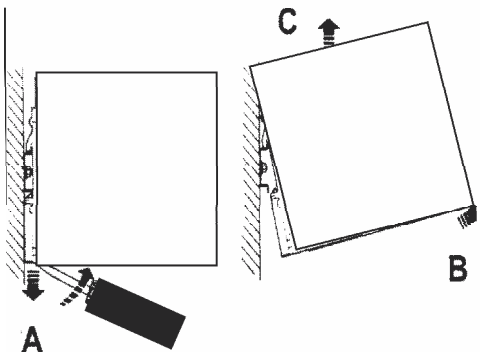
Technical Specifications (cont.)

General Data	
Isolation voltage input/output	3000V AC
Degree of protection	IP20 (EN/IEC 60529)
Protection class	II
MTBF	> 5,00,000 Hrs in acc. with IEC 61709 (SN 29500)
Type of housing	Plastic enclosure
Housing material	PC Lexan 940
Dimensions W/ H / D	2.12 inch / 3.14 inch / 2.44 inch
Weight	0.25kg approx.
Connection terminal blocks	Screw type 2.5mm^2
Climatic Data	
Ambient temperature (operation)	-30°C....+70°C
Ambient temperature (storage)	-40°C....+85°C
Humidity at 25°C	95% (no condensation)
Pollution degree environment	2 (in acc. with EN 50178)
Climatic class	3K3 (in acc. with EN 60721)

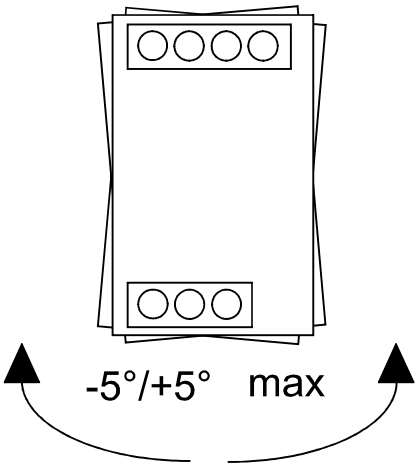
Installation



Assembly



Disassembly



Maximum angle of Asslembly

Technical Specifications (cont.)

Standards	
Electrical safety :	
Assembling device	IEC/EN 60950 (VDE 0805) EN 50178 (VDE 0160)
Installation according	IEC/EN 60950
Input/output separation	EN 60950-1(SELV), EN 60204-1(PELV) Double or reinforced insulation
EMC standards immunity	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5
EMC standards emission	EN 61000-6-4 EN 61000-3-2
Safety of electrical equipment for machines	EN 60204-1

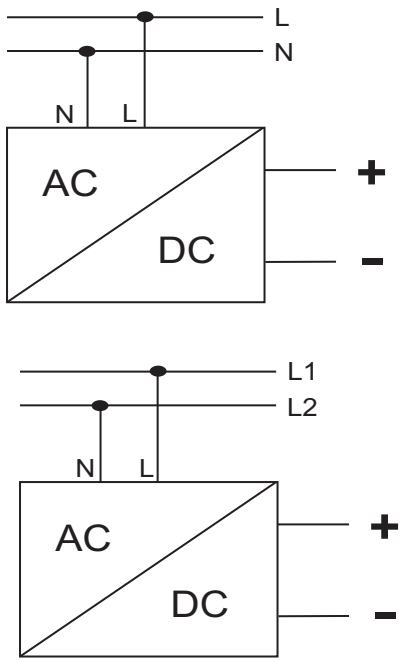
Note :

1) All parameters not specifically mentioned are measured at 230VAC input, Rated load and 25°C of ambient temperature.
2) Ripple and noise are measured at 20MHz of bandwidth short length lead

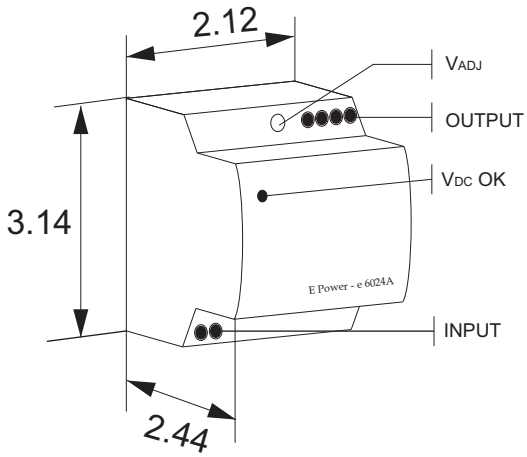
Table 1:

Parameter	E Power 6024A	E Power 6012A
Nominal Output Data	24 VDC ± 3%	12 VDC ± 3%
Adjustment Range	22 VDC.....27 VDC	10 VDC.....14 VDC
Rated Current	2.5 A @ 45°C 1.875 A @ 60°C 1.25 A @ 70°C	5.0 A @ 45°C 3.75 A @ 60°C 2.5 A @ 70°C
Power Boost current @ 60°C	2.5 A (For ≤ 3 Minutes)	5.0 A (For ≤ 3 Minutes)
Output Over Voltage Protection	35 VDC Typ.	24 VDC Typ.
Resistance to reverse feed	Max 35 VDC	Max 16 VDC

Electrical Connection



Layout & Dimensions Details



w x h x d

2.12 x 3.14 x 2.44

All dimensions are in Inch

Ordering information

Product Code	RF14-	X	X	0	0	0	0	0	0	0	0	0ST
System of RF14 (E POWER)	1P	1										
E POWER 6024A	60W,24V 1P		A									
E POWER 6012A	60W,12V 1P		Q									
Reserved				0	0	0	0	0	0	0	0	0ST

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