

LOY-POW Power Supply

LOY-POW2404

Datasheet #89099701



LOY-POW2404 are robust AC/DC modules with 24 V DC output for a maximum power of 4 W for supply of LOYBT-MSx multi-sensors.

Features

- Nominal input voltage from 100-277 V AC
- Output voltage 24 V DC
- 4W rated load (167mA@24V DC) up to +80°C
- Enhanced surge ratings of 2kV (L-N); 4kV (L-PE)
- OVC III overvoltage category up to 3000m altitude
- 6 watt boost power up to 20s
- IP65 rated
- EN55032 class B; floating or earth referenced
- 3 year warranty
- 2x 3-pole WAGO terminals included

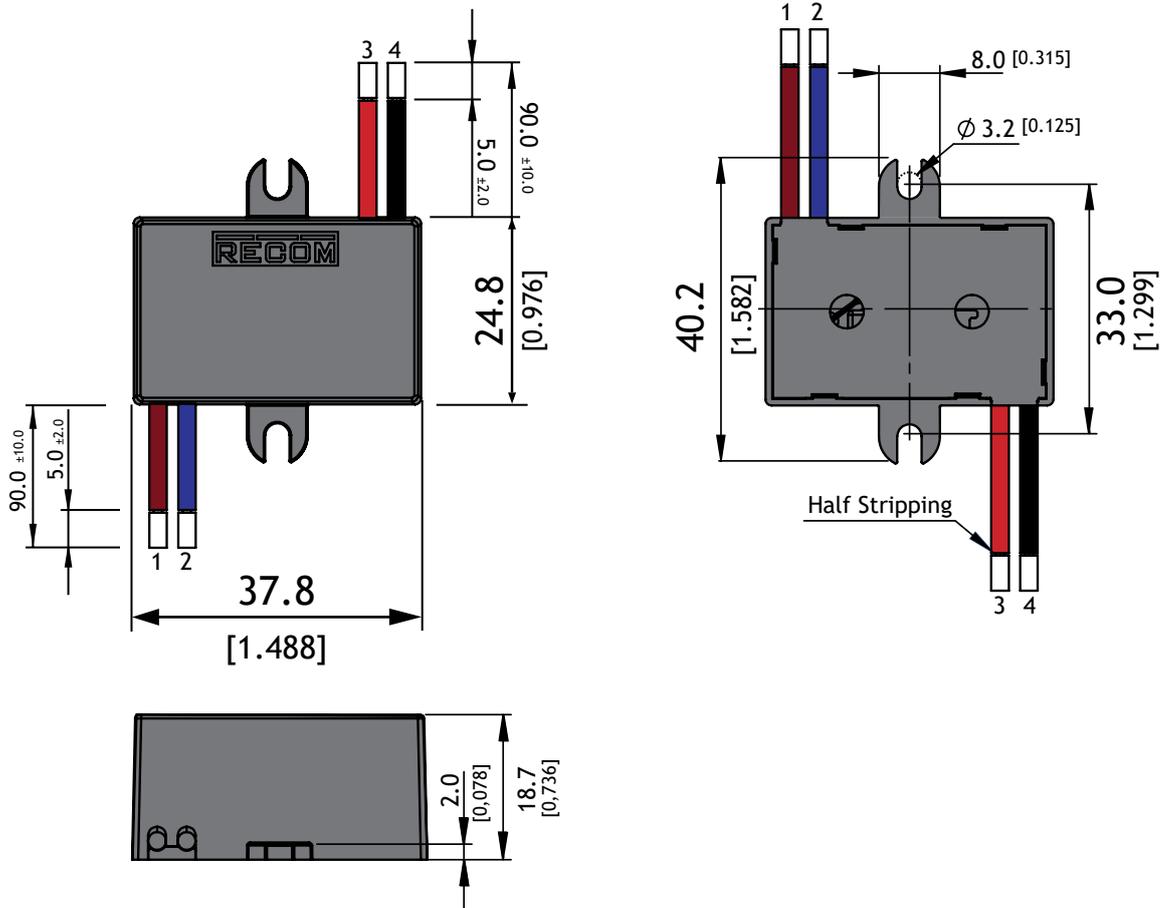
Specifications

Dimensions (mm)	37 x 24 x 18 (L x W x H), DIM055
Installation	Installation/distribution box
Output Voltage	24 V DC, 4 W, 167 mA
Nominal Input Voltage	100-277 V AC, 50/60Hz
Operating Range	85-305 V AC @ 47-63Hz; 120-430 V DC
Input Current	90 mA @ 115 V AC, 50 mA @ 230 V AC, 45 mA @ 277 V AC
Inrush Current (cold start at 25°C)	10 A @ 115 VAC, 20A @ 230 V AC, 25A @ 277 V AC
No Load Power Consumption	75 mW
Ecodesign Standby Mode Use (Available output power for stated input power)	$P_{IN} = 0.5W$, min 0.31W; $P_{IN} = 1.0W$, min 0.66W
Power Factor	115 V AC typ. 0.6; 230 V AC typ. 0.47; 277 V AC typ. 0.44
Internal Operating Frequency	124-140 kHz, typ. 132 kHz
Output Ripple and Noise	20 MHz BW, max 1% of Vout
Input Fuse	internal, fusible resistor 20Ω
Protections	SCP, OVP, OCP, OVC: according to 61558-1, OVC II (5000m), OVC III (3000m)
Class of Equipment	Class II
Isolation Voltage	1 minute, according to 61558: 4.2 kVAC; 1 minute, according to 62368-1: 6 kVAC;
Insulation Grade	reinforced
Operating Conditions	-40°C to +80°C, 10 – 90 % RH, noncondensing, degree of protection: IP65, Maximum case temperature: +110°C
Storage Conditions	-40°C to +90°C
Pollution Degree	PD2
MTBF	according to MIL-HDBK-217, G.B.: $T_{AMB} = +25^{\circ}$, 2260 x 103 hours; $T_{AMB} = +40^{\circ}$ C, 2040 x 103 hours
Design Lifetime	230 VAC and full load, $T_{AMB} = +50^{\circ}$, 110 x 103 hours
Certification	
For use with	LOYBT-MSx

Order number	Product description
LOY-POW2404	Power Supply, 4 W, 100-277 V AC, 24 VDC, 167 mA

Dimensions of the devices in mm and [inch]

DIM055 LOY-POW2440



Wire information

#	Function	Wire color	Type	Wire Cross Section
1	VAC in (L)	brown	UL-1015	22AWG (0.318mm ²)
2	VAC in (N)	blue	UL-1015	22AWG (0.318mm ²)
3	+Vout	red	UL-1015	22AWG (0.318mm ²)
4	-Vout	black	UL-1015	22AWG (0.318mm ²)



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