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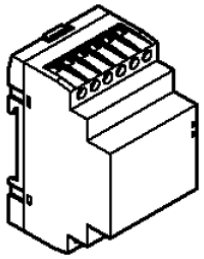
DPS
Auxiliary Dual Power Supply

Reference(s) : **4 226 86**



CONTENTS

1. USE

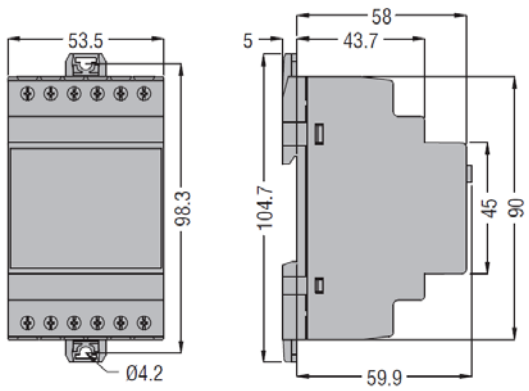
The dual power supply module automatically selects the most appropriate source between two single-phase AC power supply lines. The selection criterion is based on the presence of voltage within the minimum and maximum preset limits. Typical application is to provide auxiliary power to the switches and the control devices inside an emergency switching panel. It can therefore be used in conjunction with automatic transfer switch controllers from ATS series. Switching between the two lines occurs with defined and repeatable thresholds and times, thus increasing reliability. If both supply lines are absent and/or in the event of operation fault self-diagnosis, an additional alarm relay reports the alarm status to external devices.

2. RANGE

Reference	Management
4 226 86	Auxiliary Dual Power Supply

3. DIMENSIONS

Overall dimensions (mm)



4. ELECTRICAL AND MECHANICAL CHARACTERISTICS

		4 226 86
Power supply (from voltmetric inputs Line1 - Line2)	Rated voltage U_e	230 V AC
	Frequency	45 ÷ 66 Hz
	Power consumption/dissipation	7VA - 2.4W
Line 1 and Line 2 voltage inputs	Maximum rated voltage U_e	230 V AC
	Measuring range	80 ÷ 300 V AC
	Frequency range	45 ÷ 66 Hz
	Measuring method	True RMS
	Measuring input impedance	> 8MΩ L - N
	Wiring mode	Power supplied by the system with phase-to-neutral ≤300 V AC
Measuring accuracy		±1% (80 ÷ 300 V AC)
Supply/Line1 - Line2 Insulation voltage	Rated insulation voltage U_i	250 V AC
	Rated impulse withstand voltage U_{imp}	4.8 kV
	Power frequency withstand voltage	2.21 kV
Ambient operating conditions	Operating temperature	-30°C ÷ +70 °C
	Storage temperature	-30°C ÷ +80°C
	Measurement category	III
Connections	Terminal type	Screw-type (fixed)
	Cable cross section (min... max)	0.2 ÷ 4.0 mm^2 (24 ÷ 12 AWG)
	Tightening torque	0.8 Nm
Housing	Degree of protection	IP40 on front; IP20 connections
	Weight	300 g

	Outputs	
	Line1/Line2 -> Out Relay	Alarm Relay
Number of relays	1	1
Type of contact	2 x 2 NO (presence Line 1 and Line 2) 1 x 2 CO (relay exchange line)	1 NO
Rated voltage	250 V AC	250 V AC
Maximum voltage switching	300 V AC	250 V AC

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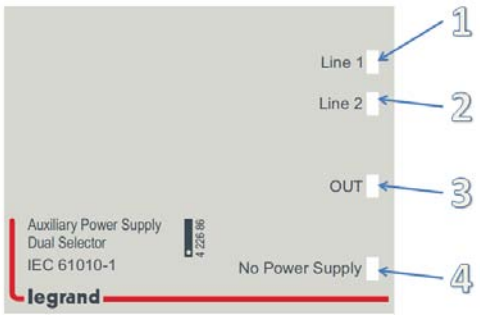
4.1 MONITORED PARAMETERS

Value	Parameter	Limits for 230 V AC
Voltage	Line absent	MIN: < 176 V
		MAX: > 288 V
	Line present	MIN: > 185 V
		MAX: < 273V

4.2 FRONTAL INDICATIONS

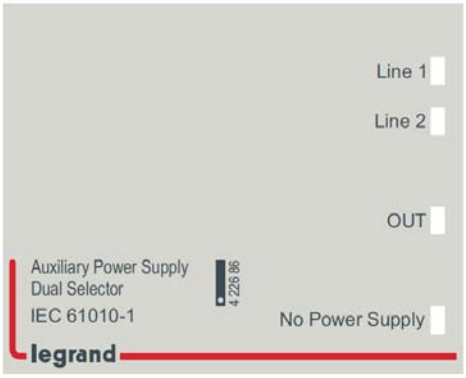


Led	Colour	Status ON	Status OFF
1	Green	Line1 OK	Line1 OFF/Out of boundaries
2	Green	Line2 OK	Line2 OFF/Out of boundaries
3	Green	OUT OK	OUT OFF
4	Red	Alarm ON/Internal error	No alarm

5. CONFORMITY

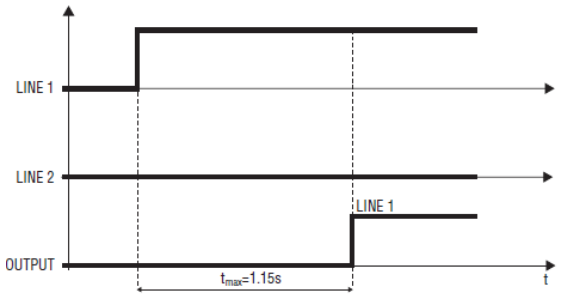
IEC 61 010-1

5.1 MARKING

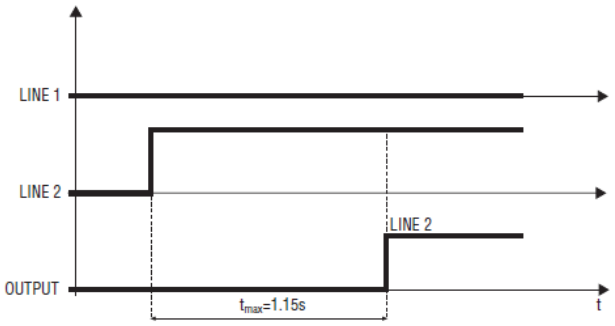


6. SWITCHING TIMES

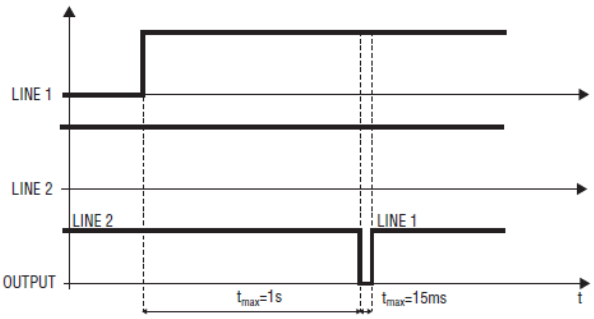
6.1 Maximum switching time upon connection of Line1 with Line2 absent 1.15s



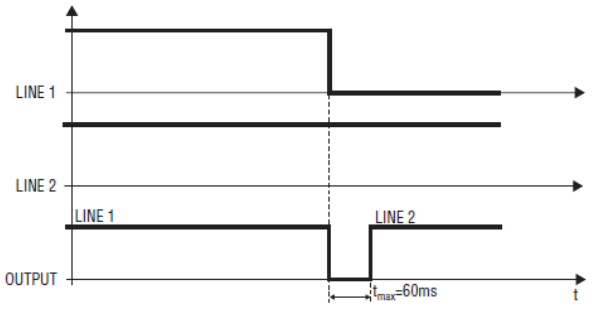
6.2 Maximum switching time upon connection of Line2 with Line1 absent 1.15s



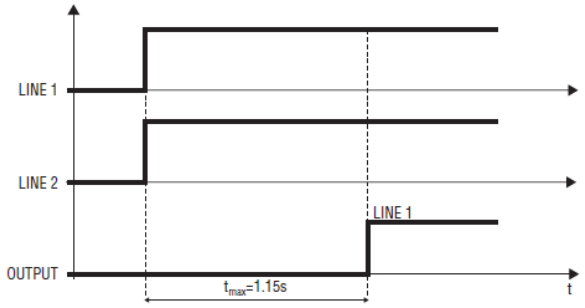
6.3 Maximum switching time upon connection of Line1 with Line2 present



6.4 Maximum switching time upon disconnection of Line1 with Line2 present



6.5 Maximum switching time upon simultaneous connection of Line 1 and Line 2



7. CONNECTIONS