

Field power

8914-PS-AC

- ◆ power for wide range of Zone 2/Div 2 mounted equipment
- ◆ field power for MTL8000 Process I/O
- ◆ 24 V dc @ 10 A for field power
- ◆ input voltage 85–264 V ac or 90–264 V dc
- ◆ Zone 2 / Div 2 mounting
- ◆ supports parallel connection for redundancy

MODULE SPECIFICATION

See also System Specification

HAZARDOUS AREA APPROVALS

Location of power supplysafe area or
Zone 2, IIC T4 hazardous area or
Class 1, Div 2, Groups A, B, C, D T4 hazardous location

Applicable standards:

- Factory Mutual Research Co., Class No. 3611 for Class I, Division 2, Groups A, B, C, D hazardous locations
- ATEX Category 3 for Zone 2

ELECTRICAL

EMC complianceTo EN 61000-2,3,4,5,6,11
EN 55011/22, EN 55014

Electrical safetyTo EN 60950

INPUT

Input voltage (AC)85–264 V ac

Input frequency (AC)47–65 Hz

Input voltage (DC)90–264 V dc

Efficiencyup to 87 %

Connections (Fig. 2)2-part pluggable connector

Input protectionslow-blow fuse and VDR*

OUTPUT

Output24 V dc ± 10%

Output current (see also Fig.1)10 A (nom.)

Connections (Fig. 3)2-part pluggable connector

Input-output isolation2800 V DC

Hold-up time (at full rated load)15 ms (typ.)

Thermal protectionreduced output power

Supply health indicatorLED

POWER-FAIL SIGNALING

Threshold to trigger "power-fail" signal23.3 V (max.)
22.0 V (min.)

Power-fail signal output (open collector)

Power supply "OK"Low impedance to ground

Power supply "failure"High impedance to ground

(Up to 8 power fail signals can be monitored by the 8510-NS-MO module when it is fitted on the 8718-CA-NS carrier.)



ENVIRONMENTAL

Operating ambient temperature–40° to +70°C

Maximum operating case temperature+80°C

Storage temperature–40° to +100°C

Relative humidity93 %, 40°C for 56 days

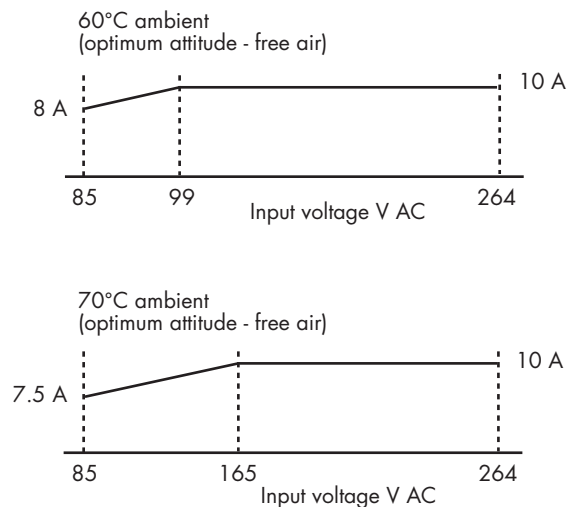
MECHANICAL

Dimensions (see Fig 4)103 (w) x 138 (h) x 113.6 (d) mm

Mounting methods35 mm x 7.5 mm T-section DIN rail
 (see also Accessories overleaf)

Weight750 g

Figure 1 - Output current de-rating



*voltage dependent resistor



Field power

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continued

TERMINAL ASSIGNMENTS

Input connector screw terminals

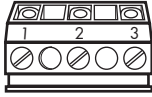


Figure 2 - AC input power

Terminal	Des.	Description
1		Protective earth
2	N	Input neutral
3	L	Input live

Output connector screw terminals

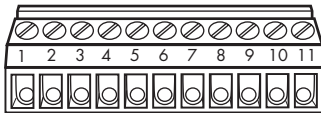


Figure 3 - DC output power

Terminal	Des.	Description
1		Protective earth
2	+	Output + ve
3	+	Output + ve
4	-	Output - ve
5	-	Output - ve
6	+	Output + ve
7	+	Output + ve
8	-	Output - ve
9	-	Output - ve
10	Aux.	Power fail signal
11		Protective earth

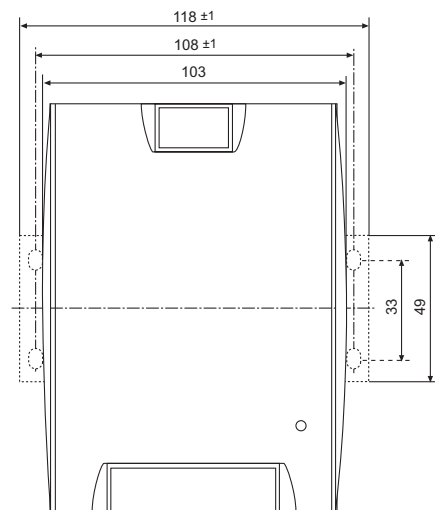
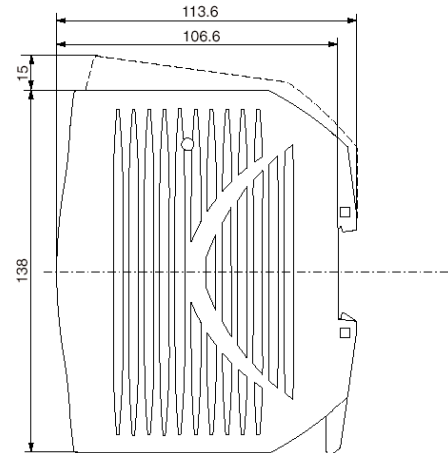
ACCESSORIES

Heavy duty DIN rail mounting kit†8413-FK-DN

Surface panel mounting kit.....8414-FK-SU

† For larger amplitude vibration environments

Figure 4 - Outline and fixing dimensions



APPROVALS

Authority	Standards	Certificate No.
FM	No. 3600/3611	3011821
TÜV	EN50021	TÜV01ATEX1774X
CSA	2258 02	1368864

Applicable standards:

- Factory Mutual Research Class No. 3600/3611 for Class I, Division 2, Groups A, B, C, D hazardous locations
- ATEX Directive 94/9/EC Category 3 - II 3 G
- CENELEC standard EN50021:1999 EEx n A II T4
- CSA International - Class 2258 02