

Power control unit

9410

- Distributes supply voltage to the power rail
- Optional connection of backup supply
- Approved for installation in I.S. / Ex zone 2 / Div. 2
- Optional redundant supply for the power rail
- Must be installed on power rail, PR type 9400



Application and advanced features

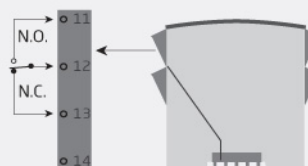
- The power control unit detects errors from any of the devices mounted on the power rail and transmits a collective alarm to the control system via the internal status relay.
- Optional connection of two power supplies - a primary supply and a backup supply.
- Redundant supply for the power rail can be obtained by mounting two 9410 devices connected to 2 separate power supplies (e.g. PR no. 9421).

Technical characteristics

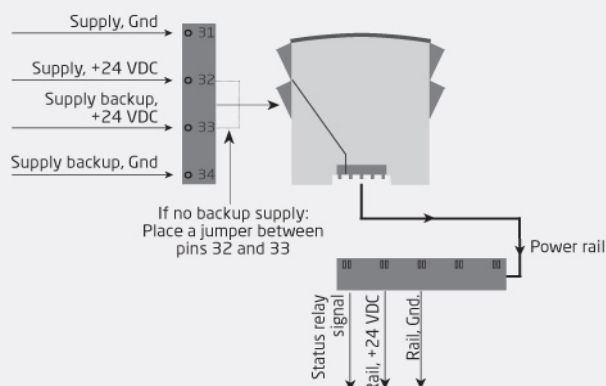
- The status relay will be energised when the following three conditions are met: 1. Supply voltage is present on pins 31 and 32. 2. Backup supply voltage is present on pins 34 and 33. (If the backup supply is not in use, a jumper must be placed between pins 32 and 33 - the jumper is delivered with the device). 3. There are no error messages from the devices connected to the power rail.
- When a collective alarm is activated via the power rail, the status relay in the 9410 will be de-energised (pins 11, 12 and 13).
- Two green front LEDs indicate connection of supply and backup.
- A red LED indicates error status.

Applications

Device status relay from power rail



Power connections



Zone 2 / FM Cl. 1, div. 2 or safe area

Order

Type	Ex approvals	
9410	ATEX, IECEx, FM, INMETRO, CCC, EAC-Ex, UKEX	: -
	UL 913, ATEX, IECEx, FM, INMETRO, CCC, EAC-Ex, UKEX	: -U9
	KCs, ATEX, IECEx, FM, INMETRO, CCC, EAC-Ex, UKEX	: -KCs

Example: 9410-U9

Environmental Conditions

Operating temperature.....	-20°C to +60°C
Storage temperature.....	-20°C to +85°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP20
Installation in.....	Pollution degree 2 & meas. / overvoltage cat. II

Mechanical specifications

Dimensions (HxWxD).....	109 x 23.5 x 104 mm
Weight approx.....	140 g
DIN rail type.....	DIN EN 60715/35 mm
Wire size.....	0.13...2.08 mm ² AWG 26...14 stranded wire
Screw terminal torque.....	0.5 Nm
Vibration.....	IEC 60068-2-6
2...13.2 Hz.....	±1 mm
13.2...100 Hz.....	±0.7 g

Common specifications

Supply

Max. required power.....	96 W
Internal power dissipation.....	2 W (max.)
Efficiency.....	> 97.9%

Input specifications

Supply voltage.....	21.6...26.4 VDC (double / reinforced isolation)
Backup supply.....	21.6...26.4 VDC

Output specifications

Status relay

Max. voltage.....	250 / 30 VDC
Max. current.....	2 AAC / 2 ADC
Max. AC power.....	500 VA / 60 W
Output voltage.....	Input voltage-0.5 VDC (@ 4 A)
Output power.....	96 W (max.)
Output current.....	4 A (max.)
Output ripple.....	Same as input ripple

Observed authority requirements

EMC.....	2014/30/EU & UK SI 2016/1091
LVD.....	2014/35/EU & UK SI 2016/1101
ATEX.....	2014/34/EU & UK SI 2016/1107
RoHS.....	2011/65/EU & UK SI 2012/3032
EAC.....	TR-CU 020/2011
EAC Ex.....	TR-CU 012/2011
EAC LVD.....	TR-CU 004/2011

Approvals

ATEX.....	KEMA 07ATEX0152 X
IECEx.....	KEM 08.0025X
UKEX.....	DEKRA 21UKEX0169X
c FM us.....	FM19US0056X /FM19CA0029X
INMETRO.....	DEKRA 23.0013X
c UL us, UL 61010-1.....	E314307
c UL us, UL 913.....	E233311 (only 9410-U9)
KCs.....	21_AV4BO_0185X (only 9410-KCs)
CCC.....	2020322303003230
EAC Ex.....	EAEU KZ 7500361.01.01.08756
DNV Marine.....	TAA00000JD