

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

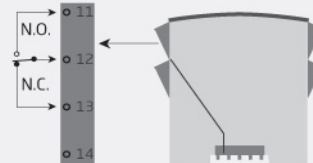
- The power control unit detects errors from any of the devices mounted on the power rail and transmits a collective alarm to the control system via the internal status relay.
- Optional connection of two power supplies - a primary supply and a backup supply.
- Redundant supply for the power rail can be obtained by mounting two 9410 devices connected to 2 separate power supplies (e.g. PR 9420).

Technical characteristics

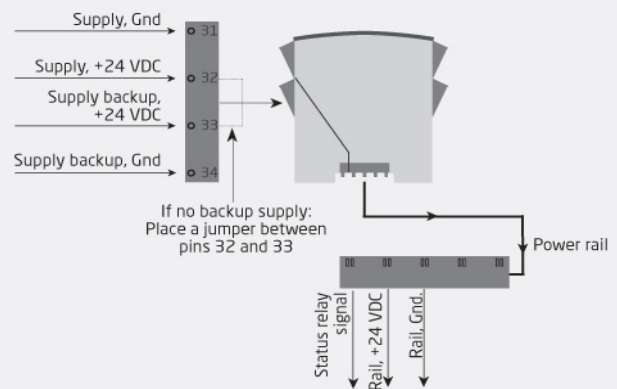
- The status relay will be energised when the following three conditions are met: 1. Supply voltage is present on pins 31 and 32. 2. Backup supply voltage is present on pins 34 and 33. (If the backup supply is not in use, a jumper must be placed between pins 32 and 33 - the jumper is delivered with the 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-energized (pins 11, 12 and 13).
- Two green front LEDs indicate connection of supply and backup.
- A red LED indicates error status.

Connections

Device status relay from power rail



Power connections



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

Order:

| |
|------|
| Type |
| 9410 |

Environmental Conditions

| | |
|---------------------------|----------------------|
| Specifications range..... | -20°C to +60°C |
| Storage temperature..... | -20°C to +85°C |
| Relative humidity..... | < 95% RH (non-cond.) |
| Protection degree..... | IP20 |

Mechanical specifications

| | |
|-------------------------------|--|
| Dimensions (HxWxD)..... | 109 x 23.5 x 104 mm |
| Weight approx..... | 140 g |
| Wire size..... | 0.13...2.08 mm ² AWG 26...14 stranded wire |
| Screw terminal torque..... | 0.5 Nm |
| Vibration..... | IEC 60068-2-6 : 2007 |
| Vibration: 2...13.2 Hz..... | ±1 mm |
| Vibration: 13.2...100 Hz..... | ±0.7 g |

Common specifications

| | |
|-----------------------------|------------|
| Max. power consumption..... | 96 W |
| Internal consumption..... | 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 |

Approvals

General approvals

| | |
|-------------------------|------------|
| EMC..... | EN 61326-1 |
| LVD 2006/95/EC..... | EN 61010-1 |
| UL..... | UL 61010-1 |
| EAC TR-CU 020/2011..... | EN 61326-1 |

Ex / I.S.

| | |
|-----------------------|-------------------|
| ATEX 2004/108/EC..... | KEMA 07ATEX0152 X |
| IECEX..... | KEM 08.0025X |
| FM..... | 3034431-C |
| INMETRO..... | NCC 12.1308 X |

Marine approval

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|-----------------|-----------------------------|
| DNV Marine..... | Stand. f. Certific. No. 2.4 |
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