



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

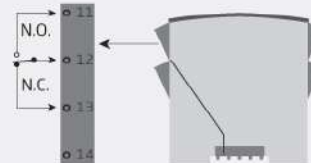
- The power control unit detects errors from any of the devices mounted on the power rail and transmits a collective alarm to the control system via the internal status relay.
- Optional connection of two power supplies - a primary supply and a backup supply.
- Redundant supply for the power rail can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

Technical characteristics

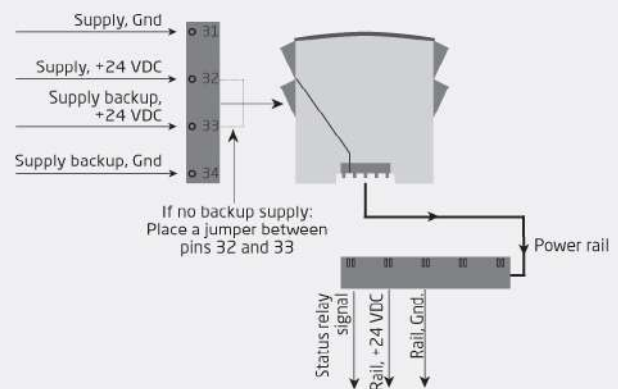
- The status relay will be energised when the following three conditions are met: 1. Supply voltage is present on pins 31 and 32. 2. Backup supply voltage is present on pins 34 and 33. (If the backup supply is not in use, a jumper must be placed between pins 32 and 33 - the jumper is delivered with the 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..... | RU C-DK.HA65.B.00355/19 |
| DNV Marine..... | TAA00000JD |