

## 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



## Advanced features

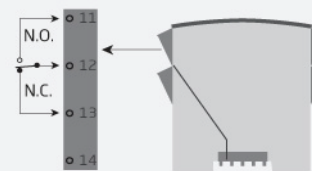
- The power control unit detects errors from any of the devices mounted on the power rail and transmits a collective alarm to the control system via the internal status relay.
- Optional connection of two power supplies - a primary supply and a backup supply.
- Redundant supply for the power rail can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

## Technical characteristics

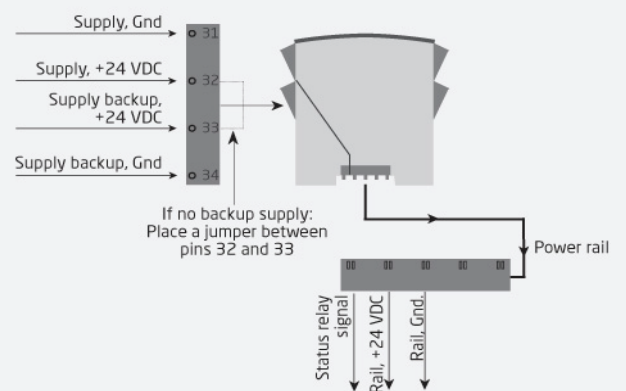
- The status relay will be energised when the following three conditions are met: 1. Supply voltage is present on pins 31 and 32. 2. Backup supply voltage is present on pins 34 and 33. (If the backup supply is not in use, a jumper must be placed between pins 32 and 33 - the jumper is delivered with the 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.

## Application

### 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, EAC-EX, UKEX : -
	UL 913, ATEX, IECEX, FM INMETRO, EAC-EX, UKEX : -U9
	KSC, ATE, IECEX, FM INMETRO, EAC-EX, UKEX : -KSC

## Example: 9410-U9

### Environmental Conditions

Operating temperature	: -20°C to +60°C
Storage temperature	: -20°C to +85°C
Calibration temperature	: 20...28°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	: 140g
DIN rail type	: DIN EN 60715/35 mm
Wire size	: 0.13...2.08 mm <sup>2</sup> 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	: 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
AT	: 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 2IUUKEX0169X
c FM us	: FMI9US0056X /FMI9CA0029X
INMETRO	: DEKRA 16.0007 X
c UL us, UL 61010-	: 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
ClassNK	: TA18527M