General Specifications

AC-535-00

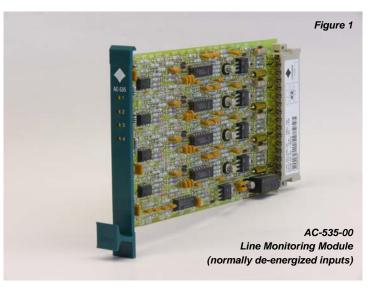


GS48C35Z00-00E-N

Line Monitoring Module (normally de-energized inputs)

GENERAL

This module has four monitoring circuits for fail-safe 24 Vdc inputs.



The input connections are guarded against interruption and short-circuiting, each circuit having a front indication. The logic input will be disabled in case of a line short. This function can be disabled per channel. In this case the module acts as an AC-534-B.

The module is also provided with a common annunciating contact.

The monitoring module has a number of typical characteristics:

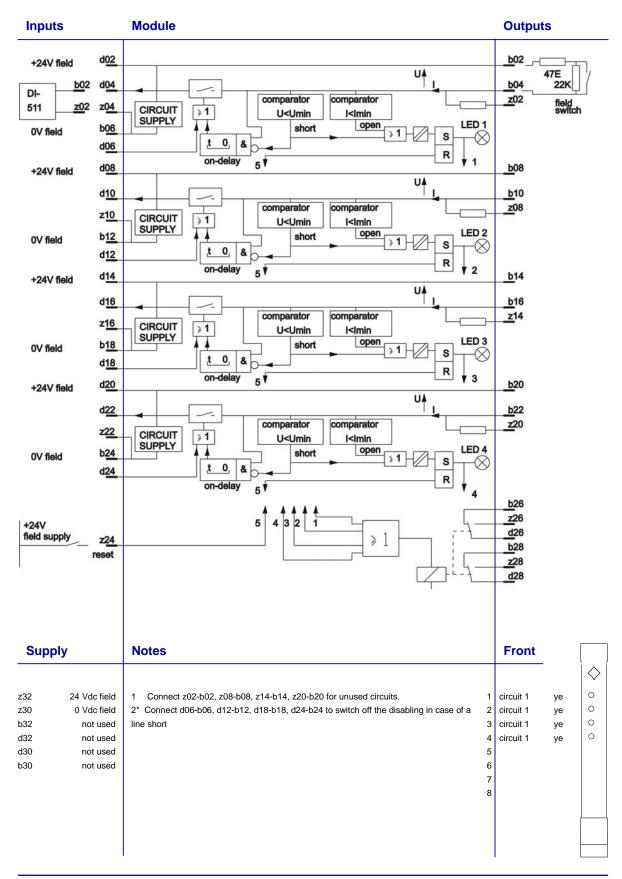
- · Galvanic isolation per circuit
- LED indication with memory function
- Common annunciator contact

The power for each galvanic isolated channel has its own power connection

The power for each circuit must be provided at the input connections. The voltage through the input connection is monitored by comparators, annunciating a line fault. The annunciated value is held in a memory circuit until the next reset.



FUNCTIONAL DIAGRAM



■ SPECIFICATIONS

	Description	Data
General	No. of channels	4
	Size	single Euro format 3TE (160x100x15 mm)
	Connector	DIN 41612 Bauform F 48p
	Identification	AC-535 on front
Environmental	Temperature (working)	-20 to +70 °C
	Temperature (storage)	-25 to +85 °C
	Relative humidity	max. 95%, no condensation
	EMC	EN 61000-6-2 Immunity
		EN 61000-6-4 Emission
		With an EMC system enclosure
	Shock	10g ; 16 ms
	Vibration	10-55 Hz ; ± 0.35 mm
Input		voltage, switch and input DI-511
	Voltage	24 Vdc ± 10%
	Ripple	< 1 V top-top
	Supply current	7-30 mA
	Output current	< 17 mA
	Internal voltage drop	0.5-1.0 V
	Load	switch, 47E in series, 22k parallel, both resistors metal film >
		0.4 W, 5%
	Load test current	1 mA, switch open @24 V
	Load test voltage	1 V, switch closed @20 mA
	Error reset	+24 Vdc, 2 mA, threshold 6 – 18 Vdc
Output	Output type	contact DPDT
	Voltage	60 Vdc, 48 Vac
	Current	0.5 A
	Min. switching load	1 V and 0.5 mA
	Status indication	yellow LED per channel
	Open circuit error	load > 30-50 kΩ
	Short circuit error	load < 15-25 Ω
	Level "1" to DI-511	load < 300-500 Ω
Propagation	On delay	ca. 650 ms to DI-511
	Off delay	ca. 2 ms to DI-511
	On delay	ca. 200-300 ms "0" to error
	On delay	ca. 200-500 ms "1" to error
	Off delay	ca. 4 ms, error reset
Supply	Supply voltage	24 Vdc ± 10%
	Ripple	< 1 V top-top
	Current consumption	5-40 mA
Isolation	Circuits	0.5KV (test)
	Contact output	0.5 KV (test)
Dissipation		0.8-2.1 W error off
		1.2-3.0 W error on

NOTES