General Specifications

AC-534-C0

GS48C34C00-00E-N

Line Monitoring Module (24 Vdc outputs, 0.2–20 W)

■ GENERAL

This alarming line monitoring module has 4 channels for line monitoring of a 24 Vdc output with low test current (0.2 - 20 W load).

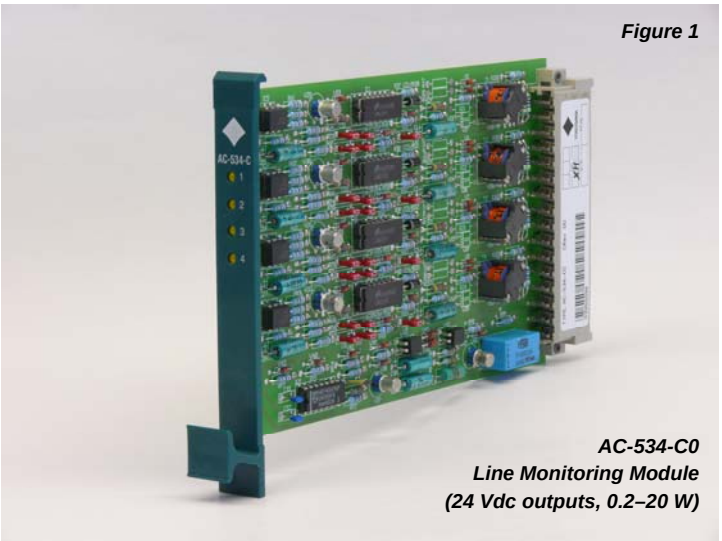

Figure 1

AC-534-C0
Line Monitoring Module
(24 Vdc outputs, 0.2–20 W)

This alarming line current monitoring module has 4 channels. Each channel can be used for line monitoring of a 24 Vdc output with low test current (0.2 - 20 W load). The lines to the load are monitored for interruption.

Each channel has a galvanic isolation and a line fault memory function. Memories can be reset by the common reset input. The module is also provided with a common annunciating contact.

An internal galvanically isolated power supply provides an auxiliary voltage so that the lines can be checked when the load is activated as well as deactivated. The line current and voltage are monitored by comparators, annunciating a line fault. The annunciation is held in memory until reset.

The module is provided with 4 yellow LED's with memory function, indicating a line fault of each channel.

YOKOGAWA

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GS48C34C00-00E-N
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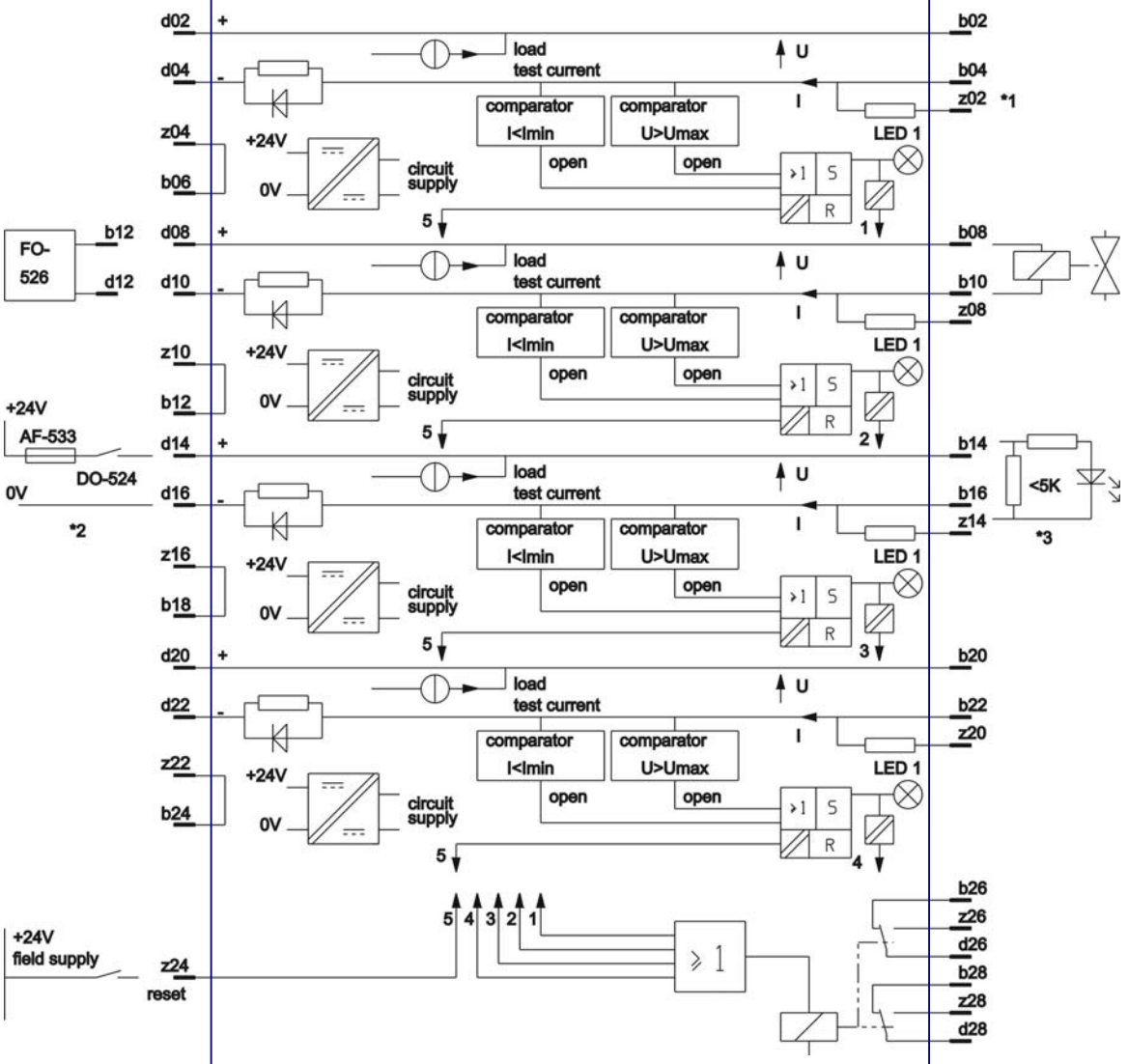
■ FUNCTIONAL DIAGRAM



Supply

z32	24 Vdc field
z30	0 Vdc field
b32	not used
d32	not used
d30	not used
b30	not used

Notes

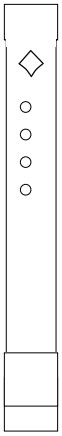
*1 Connect z02-b02, z08-b08, z14-b14, z20-b20 for unused circuits.

*2 Voltage sources should be fuse protected, max 2 AF.

*3 Connect a parallel resistor (at the load) in case of a non-linear load to comply with the error detection levels.

Front

1	circuit 1	ye
2	circuit 2	ye
3	circuit 3	ye
4	circuit 4	ye
5		
6		
7		
8		



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■ SPECIFICATIONS

Description		Data
General	No. of channels	4
	Size	single Euro format 3TE (160x100x15 mm)
	Connector	DIN 41612 Bauform F 48p
	Identification	AC-534-C 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	24 Vdc ± 15% (fuse protected, max. 2 AF)
	Ripple	max. 1 V top-top
	Current	equals load current
	Error reset	+24 Vdc, 2 mA, threshold 6 – 18 Vdc
Output	Voltage	equals input voltage minus 0.5 – 1.0 V
	Current	0.05 – 0.83 A (0.2 – 20 W @ 24 Vdc) for normal loads
		0.4 – 0.83 A (10 – 20 W @ 24 Vdc) for fail-safe loads
	Line test current	0.05mAdc
	Line test voltage	0.55Vdc
	Open line level	8 – 17 kΩ @ load off 9 – 15 kΩ @ load on
	Contact Output	relay contact DPDT
	Voltage	60 Vdc, 48 Vac
	Current	0.5 A
	Minimum switching load	1 V and 0.5 mA
	Status indication	yellow LED per channel
Propagation	On delay	300 ms
	Off delay	20 ms
Supply	Field supply	24 Vdc ± 10% (+20% temporary) max. 1 V top-top ripple < 65mA @ errors off < 100mA @ errors on
Isolation	Channels	0.5 KV (test)
	Contact output	0.5 KV (test)
Dissipation		4.5 W @ all channels no load, errors off 5.3 W @ all channels full load, errors off Note: use 6 TE mounting space for loads > 6 W

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■ NOTES

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