MITSUBISHI POWER
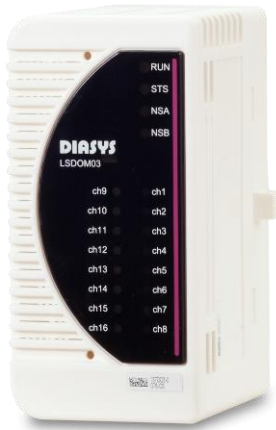
LSDOM03 DO module

LS communication　Digital outputs : 16

■Summary

＊Number of outputs　　　　　　:　16 (16 ch common isolation)

＊Contact　　　　　　　　　　　:　Dry / A contact (Normally Open)

＊Contact method　　　　　　　:　Open collector Sink output
　　　　　　　　　　　　　　　　　(Minus common)

＊Module ambient temperature　:　-5 to 60℃

＊Insulation method　　　　　　:　Photocoupler insulation

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■Specifications

ITEM		SPECIFICATION
Output	Number of channels	16　(16 ch common isolation)
	Contact	Dry / A contact (Normally Open)
	Contact method	Open collector sink output (minus common) *[1]
	Contact on voltage	Less than 3 V
	Max rating contact voltage	DC 250 V
	Max contact current	Continuous 75 mA
	Data refresh cycle	ON　→　OFF　:　Less than 1 ms OFF　→　ON　:　Less than 1 ms
Operation cycle usable in DPS		5 msec or more
Dielectric strength		AC 1500 V between output terminal and PE
Communication with IOA	Communicaton method	LVDS
	Communication speed	100 Mbps
Self-diagnostic functions		Power voltage check (24 V, 3.3 V, 1.2 V) Clock check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) Heartbeat check (FPGA-MCU for diagnosis, MCU for diagnosis -FPGA) CRC check (FPGA)
Protection	(Power supply Protection)	Overvoltage protection Overcurrent protection
Indicator	Display LED	4: RUN (Run)/STS (Status)/NSA (Network status A)/NSB (Network status B)
	Channel State LED	16: Ch 1 to Ch 16
Insulation method		Photocoupler insulation
Hot swap		Possible
Power supply		DC 24 V ±20% (The voltage supplied from the backplane)
Environmental conditions	Module ambient temperature	(Operating) -5 to 60°C (Storage) -40 to 85°C
	Module ambient humidity	(Operating / Storage) 10 to 95% RH or less (No condensation)
Vibration		3.5 mm @5 to 8.4 Hz 1 G @8.4 to 150 Hz
Shock		15 G 11 ms
Current consumption		Less than 51 mA
Weight		0.10 kg
Dimensions		62 mm (D) x 94 mm (H) x 46 mm (W) (Except projection)
Standard/Directive		EN 61131-2:2007, RoHS

About compliant module type

　　For compliant modules of this product, please refer to ″ Compliant backplane list (CGS-S9901-E-XX) ″.
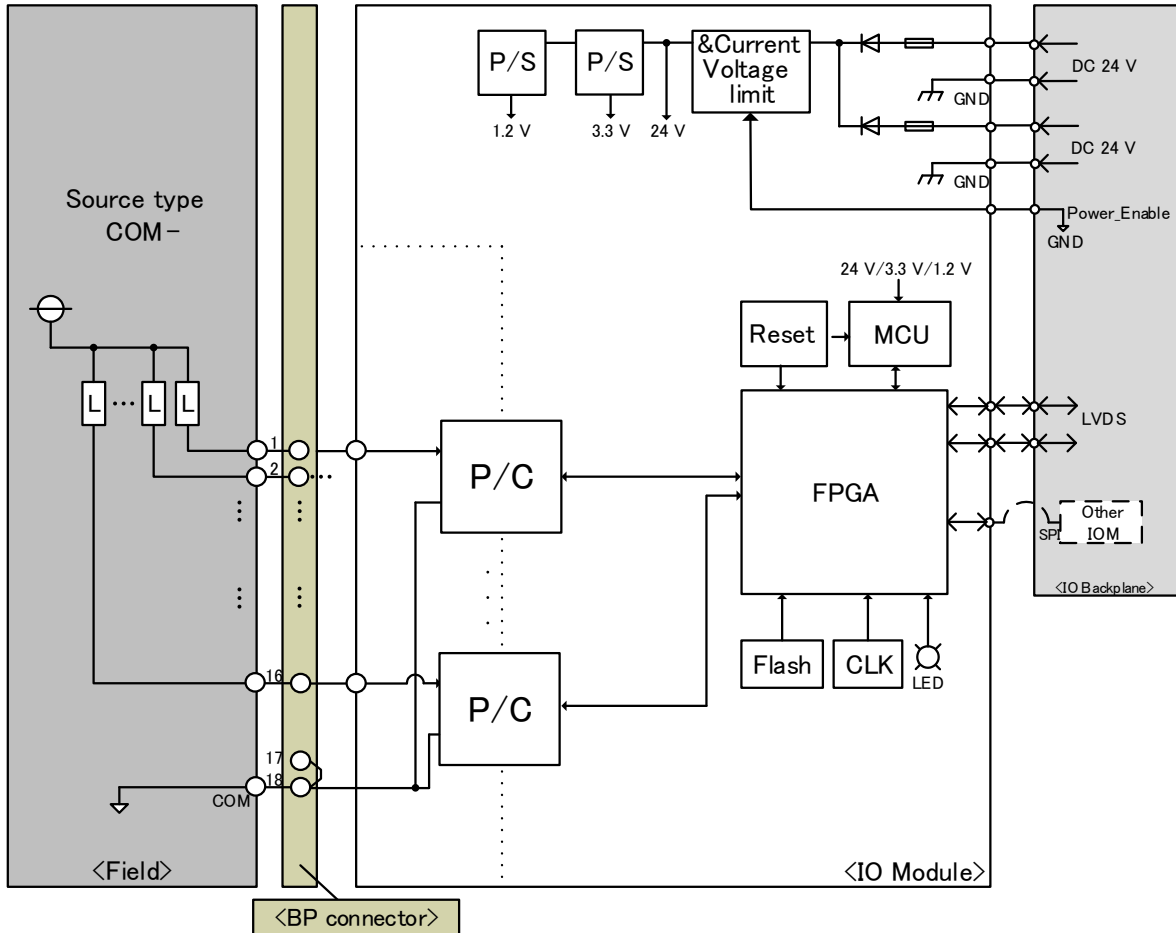
　　For compliant modules of this product, please refer to ″ Compliant accessory connector list (CGS-S9902-E-XX) ″.

*[1]　Be careful as it will always be ″ON″ if LSDOM02 and 03 are wired in reverse polarity.

　　Also, if overcurrent is applied in that state, the module will burn out.

LSDOM03　DO module

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■Block diagram

P/S	:	Power supply
COM	:	Common
CLK	:	Clock
FPGA	:	Field programmable gate array
LED	:	Light emitting diode
MCU	:	Micro control unit
GND	:	Ground
IOM	:	I/O module
IOA	:	I/O adapter
LVDS	:	Low Voltage Differential Signaling
BP	:	Backplane
P/C	:	Photocoupler
⬒	:	Fuse
⊲	:	Diode
⊕	:	Power supply
L	:	Load

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