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InteliLite^NT MRS 15

Datasheet

Order code: IL-NT MRS 15

Controller for single gen-set applications

Product description

> Compact gen-set controller for single gen-set operating in standby mode

> Meets all requirements for Manual and Remote Start (MRS) applications

> Full gen-set monitoring and protection

Key features

> Outstanding EFI engine support with diagnostic messages in plain text via J1939

> Detailed RTC event and performance log

> Plug-in and CAN bus extension modules capability

> WebSupervisor, AirGate and LOCATE support with plug-in module

> On-line control and monitoring over web pages with plug-in module

> Fuel theft protection and Total fuel consumption monitoring

> Earth fault current protection with plug-in module

> Alternative switchable configuration

> Automatic GCB control

> Magnetic pickup input

> D+ preexcitation terminal

> True RMS measurement

> 3 phase power measurement of gen-set incl. kWh

Application overview

MRS
Generator Circuit Breaker

Technical data

Power supply

Power supply range	8-36 V DC
Power supply drop-out immunity	100 ms (from min. 10 V)
Power consumption	approx. 100 mA / 8 V; 40 mA / 36 V
Peak power consumption (LT)	approx. 0,33 A / 8 V; 0,18 A / 36 V
Backup battery type	CR 1225
Estimated backup battery lifetime	10 years

Operating conditions

Operating temperature	-20 ˚C to +70 ˚C
Operating temperature (LT version)	-40 ˚C to +70 ˚C
Operating humidity	95 % non-condensing (EN 60068-2-30)
Protection degree (front panel)	IP 65
Vibration	5-25 Hz, ± 1.6 mm 25-100 Hz, a = 4 g
Shocks	a_{max} 500 m/s^2
Storage temperature	-30 ˚C to +80 ˚C

Voltage measurement

Measurement inputs	3 ph-n Gen voltage
Measurement type	True RMS
Voltage range	480 V Ph-Ph (277 V Ph-N)
Max. measured voltage	340 V Ph-N
Voltage accuracy	2 % from nominal voltage
Frequency range	30-70 Hz, measured from L3
Frequency accuracy	0.05 Hz

Current measurement

Measurement inputs	3 ph generator current
Measurement type	True RMS
Current range	5 A
Max. measured current	9 A
Max. allowed current	10 A continuous, 50 A/1 s
Current accuracy	2 % from nominal current

Binary inputs

Number	6 non-isolated
Input resistance	4.2 kΩ
Common pole	Positive, V_s = 8-36 V DC
Close/Open indication	0-0.8 V close contact 2 - 36 V - V_s open contact

Binary outputs

Number	6 non-isolated
Operating voltage	8-36 V DC
Switching to	Negative supply terminal
Max current	0.5 A (2 A per group)

Analog inputs

Number	3, non-isolated
Electrical range	0-2500 Ω
Resolution	10 bits, 4 digits
Precision	2 % from measured value
Supported sensor types	Predefined: VDO 10Bar, VDO Temperature, VDO Fuel level User-defined: 10 points non-linear sensors can be defined by the user

Communication

CAN1	External modules, 250 kbps, max 200 m

Magnetic pick-up

Voltage input range	2–70V$_{pp}$
Frequency input range	4 Hz to 10 kHz (min 2 V$_{pp}$ @ 4 Hz, 6 V$_{pp}$ @ 10 kHz)
Frequency measurement tolerance	0.2 %

D+

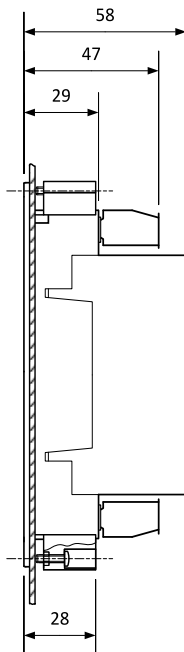|	
Excitation current	250 mA, during the engine start only
Charging fail threshold	80 % of Usupply

Display

Type	Build-in monochromatic
Resolution	128 × 64 px

Dimensions, terminals and mounting
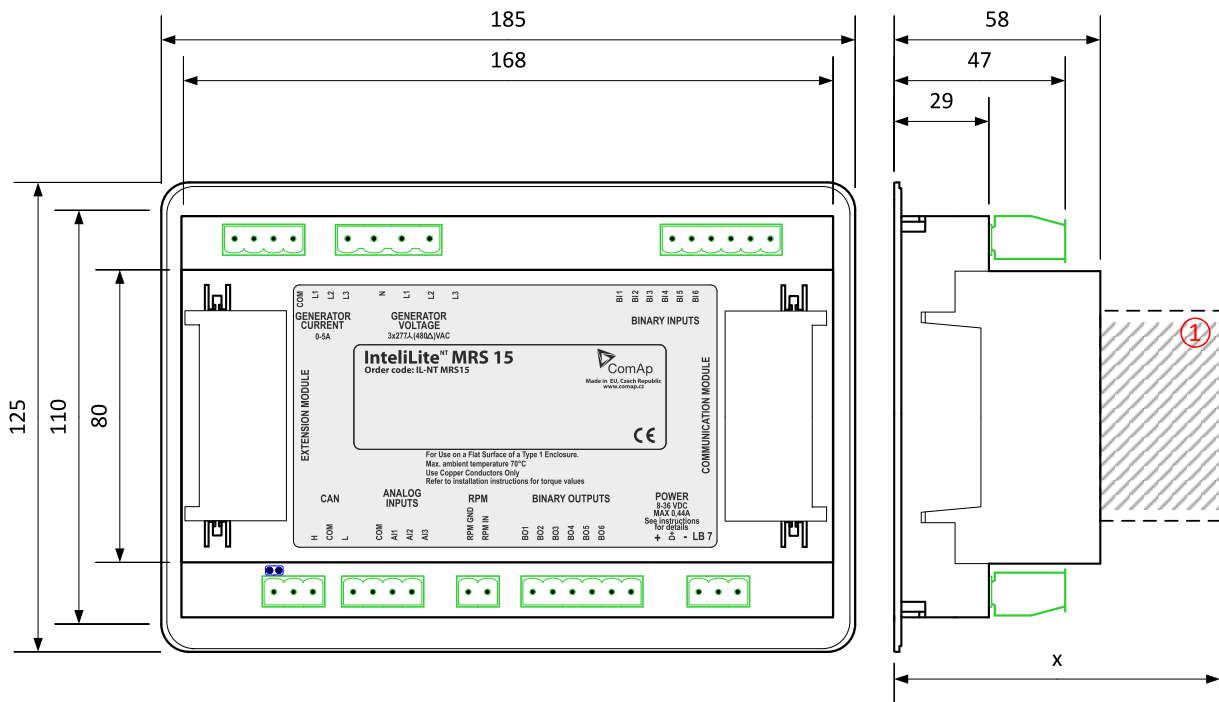
Note: Dimension x depends on plug-in module.

Panel door mounting

Overview of parameter x

Plug-in module	Parameter x [mm]
IL-NT-AOUT8	75
IL-NT-BIO8	74
IC-NT-CT-BIO7	76
IL-NT-RS232	113
IL-NT-RS232-485	115 @ RS232 / 74 @ RS485
IL-NT-GPRS	122
IL-NT-S-USB	128
IB-Lite	108

Note: Parameter x includes reserve for connectors of plug-in modules.

Note: The controller is to be mounted onto the switchboard door. The requested cut-out size is 175x115 mm. Use the screw holders delivered with the controller to fix the controller into the door.

Available extension modules

Product	Description	Order code
IL-NT AOUT8	8 analog outputs packed in a unit	IL-NT-AOUT8
IL-NT BIO8	8 binary inputs in a unit (HW switchable to 8 binary outputs)	IL-NT-BIO8
IC-NT CT-BIO7	7 binary inputs (HW switchable to 7 binary outputs) and 1 AC current measuring input	IC-NT-CT-BIO7
IL-NT RS232	Communication module which provides additional RS232 interface for controller	IL-NT-RS232
IL-NT RS232-485	Communication module which provides additional RS232 and RS485 interface for controller	IL-NT-RS232-485
IL-NT GPRS	Communication module with integrated GSM modem with GPRS Internet connection	IL-NT-GPRS
IL-NT S-USB	Communication module which provides additional USB interface for controller	IL-NT-S-USB
IB-Lite	Communication module which provides additional Ethernet interface for controller	IB-Lite
IGS-PTM	8 binary inputs, 8 binary outputs, 4 analog inputs and 1 analog output in a unit	IGS-PTM
IG-IOM	8 binary inputs, 8 binary outputs, 4 analog inputs and 1 analog output in a unit	IG-IOM
IGL-RA15	15 binary LED output (3 colors) packed in a rugged metal unit	IGL-RA15

Related products

Product	Description	Order code
IL-NT RD (SW)	Remote Display Software for InteliLite NT	IL-NT RD

Functions and protections

Description	ANSI code	Descritption	ANSI code
Overvoltage	59	**Overfrequency**	81H
Undervoltage	27	**Underfrequency**	81L
Gas (Fuel) Level	71	**Overload**	32
Phase Rotation	47	**Overcurrent**	50+51
Current Unbalance	46	**Voltage Asymmetry**	47
Earth Fault	51N+64		

Certificates and standards

- > EN 61000-6-3:2006
- > EN 61000-6-3:2006
- > EN 61000-6-1:2005
- > EN 61000-6-2:1999

CE

List of standards is available on: https://webstore.iec.ch/

E-mail: info@comap-control.com
Web: www.comap-control.com

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