ComAp
The heart of smart control

InteliLite NT MRS 3

Order code: IL-NT MRS 3

Controller for single gen-set applications

Datasheet

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

- Running hours event and performance log
- Plug-in extension modules capability
- Automatic GCB control
- D+ preexcitation terminal
- True RMS measurement
- 3 phase power measurement of gen-set

Application overview

SAVANTECH
The Source of Energy Generators
An Engineering and Technology Company

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 % w/o condensation (IEC/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	4 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	4 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

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 %

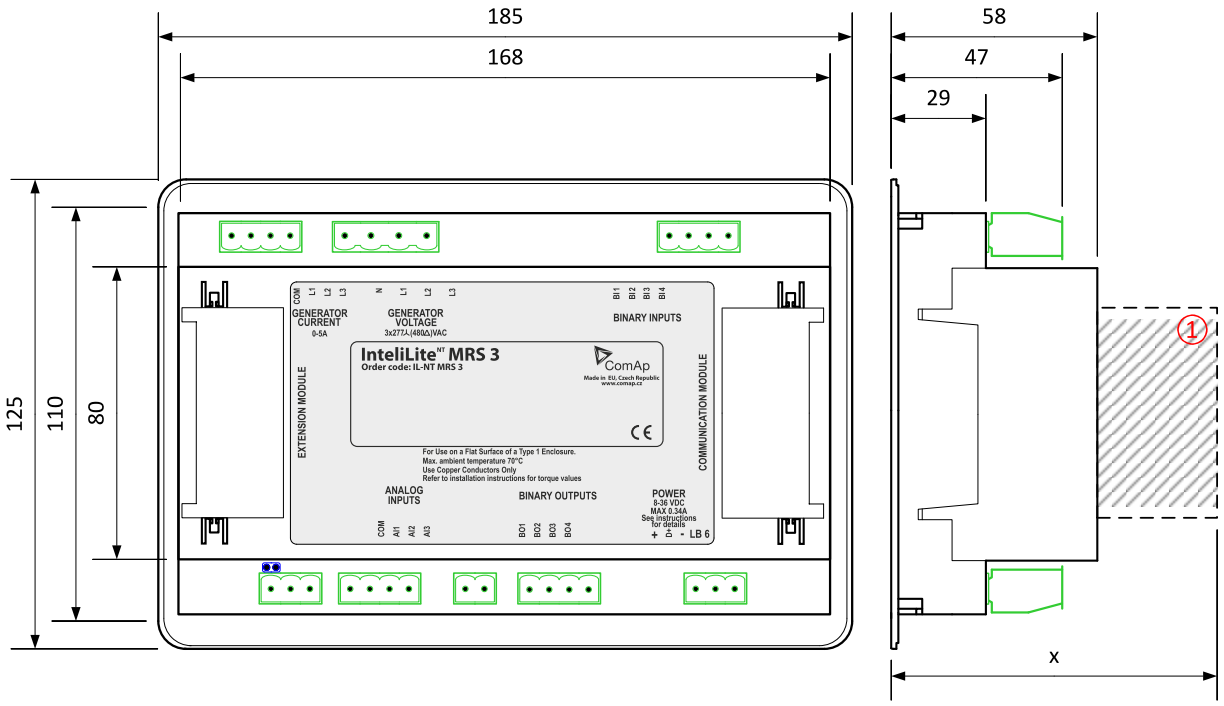
D+

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

Display

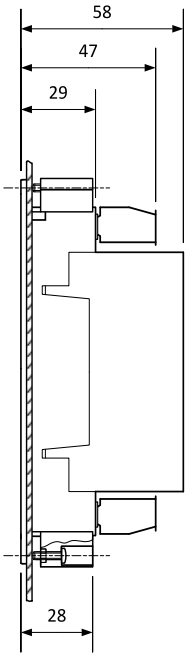
Type	Build-in monochromatic
Resolution	128 × 64 px

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
IL-NT-RS232	113
IL-NT-RS232-485	115 @ RS232 / 74 @ RS485
IL-NT-GPRS	122
IL-NT-S-USB	128

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
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

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

Certificates and standards

- EN 61010-1:95 +A1:97
- 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/

Manufacturer:
ComAp a.s.
Czech Republic
Phone: +420 246 012 111
E-mail: info@comap-control.com
Web: www.comap-control.com