





Order code: IL3LAMF9BAA

Controller for single gen-set applications

Datasheet

Product description

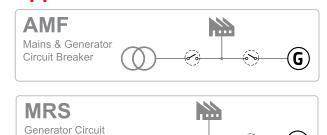
- Single gen-set controller for stand-by and primepower applications
- Direct communication with EFI engines
- All-in-one intuitive & powerful PC tool for configuration/monitoring/control, locally or remotely

Key features

- Stand-by and prime-power application in one unit
- 5 languages in the controller & Translator functionality
- 3 levels of passwords
- 3 sets of alternative configurations
- Magnetic pickup
- ECU support & Tier 4 Final ready
- Plug-in module concept for more capabilities (Modbus, Internet, SMS, inputs/outputs)
- 1 slot for plug-in modules
- Power over USB for controller's adjustment
- Adjustable D+ threshold
- Ventilation pulse
- Flexible Choke
- Fuel Pump control
- 6 binary outputs, 6 + 1 binary inputs, 3 analog inputs
- 2 high-current binary outputs
- Adjustable delay for binary inputs

- Alarms and gen-set status assignable to binary outputs
- Run Hours source selector
- Multi-purpose scheduler functionality
- 3 maintenance timers
- Detailed history log with up to 150 records
- Zero power mode
- Possibility to disable protections
- Modbus register mapping possibility
- Start on low battery (only for native prime-power configuration)
- Cutout: 172 mm × 112 mm (same as IL-NT family)

Application overview



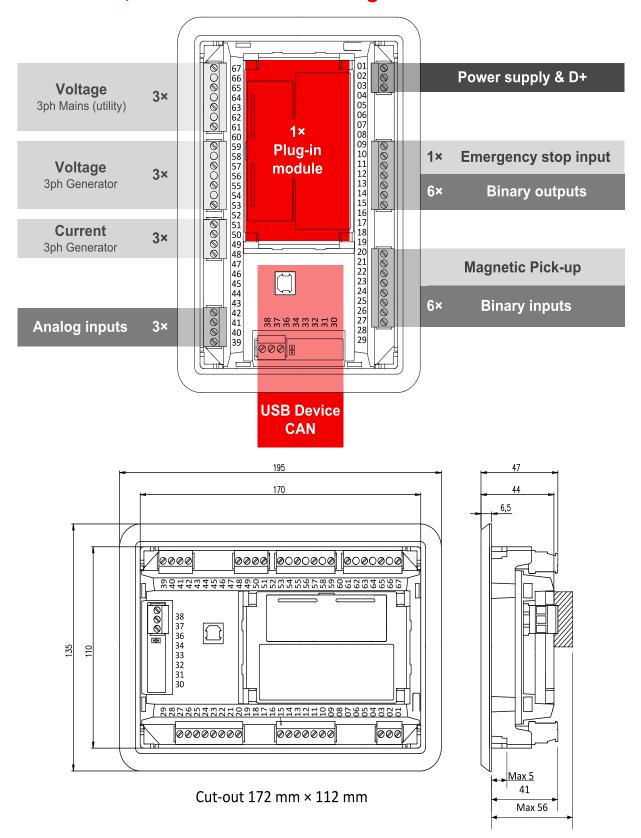
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InteliLite 9 Datasheet Related HW ver: 1.0.0 Related SW ver: 1.0.0 Date of issue: 6/27/2019

Breaker



Dimensions, terminals and mounting



Note: The final depth of the controller depends on the selected extension module - it can vary between 41 mm and 56 mm. Mind also the size of connectors and cables (e.g. in case of RS232 connector, add about 60 mm more for a standard RS232 connector and cable).

Note: Enclosure type rating with mounting instruction - for use on a flat surface of a type 1 enclosure.

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Technical data

Power supply

Power supply range	8-36 V DC	
	394 mA / 8 V DC	
Power consumption	255 mA / 12 V DC	
	140 mA / 24 V DC	
	97 mA / 36 V DC	
Fusing	Power terminal max. 3 A	
	E-Stop max.12 A	
Fusing E-Stop		
Max. Power Dissipation	3.5 W	

D+ terminal

Max. output current	250mA / 36V
Charging fail threshold	Adjustable

Operating conditions

Operating temperature	-20 °C to +70 °C	
Storage temperature	-30 °C to +80 °C	
Protection degree (front panel)	IP 65	
Operating humidity	95 % w/o condensation	
Vibration	5-25 Hz, ± 1.6 mm 25-100 Hz, a = 4 g	
Shocks $a = 500 \text{ m/s}^2$		
Surrounding air temperature rating 70°C		
Suitable for pollution degree 2		

Voltage measurement

Measurement inputs	3ph-n Gen voltage , 3ph-n Mains
Measurement	277 V / 480 V AC (EU)
range	346 V / 600 V AC (US/Canada)
Linear measurement and protection range	381 V / 660 V
Accuracy	1 %
Frequency range	40-70 Hz (accuracy 0.1 Hz)
Input impedance	$0.72~\text{M}\Omega\text{ph-ph}$, $0.36~\text{M}\Omega\text{ph-n}$

Current measurement

Measurement inputs	3ph Gen current	
Measurement range	5 A	
Max. allowed current	10 A	
Accuracy	1.5 % for full temperature range (1 % from 0 °C to 50 °C)	
Input impedance	< 0.1 Ω	

Display

Туре	Build-in monochromatic 3.2"
Resolution	132 × 64 px

E-Stop

Dedicated terminal for safe Emergency Stop input.

Physically disconnects BO 1 & BO 2 from power supply.

Binary inputs

Number	6, non-isolated	
01	0-2 V DC close contact	
Close/Open indication	>6 V DC open contact	

Binary outputs

	4, non-isolated	
Low current	max 0.5 A	
	switching to positive supply	
	voltage, BATT+	
High current	2, non-isolated	
	max 5 A (60 °C), max 4 A (70	
	°C)	
	switching to positive supply	
	voltage, E-Stop	

Analog inputs

Number	3 resistive, non-isolated	
Resolution	0.1 Ω	
Range	0-2500 Ω	
Input impedance	Ω 008	
Accuracy	±2 % from value in range 0- 2500 Ω	
	± 1.5 kΩ in range 2.5 - 15 kΩ	

Magnetic pickup

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Voltage input range	4 Vpk-pk to 50 Vpk-pk in range 4 Hz to 1 kHz 6 Vpk-pk to 50 Vpk-pk in range 1 kHz to 5 kHz 10 Vpk-pk to 50 Vpk-pk in range 5 kHz to 10 kHz	
Frequency input range	4 Hz to 10 kHz	
Frequency measurement tolerance	0.2 % from range 10 kHz	

Communications

USB port	B-connector, non-isolated	
	CAN bus, 250 kbps, max 200	
CAN 1	m, 120 Ω termination option, non-isolated	

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Available extension modules

Product	Description	Order code
CM-4G-GPS	For SMS and GPS info	CM14GGPSXBX
CM-Ethernet	Ethernet interface	CM2ETHERXBX
CM-GPRS	ForSMS	CM2GPRSXXBX
CM-RS232-485	Dual port interface	CM223248XBX
EM-BIO8-EFCP	8 additional binary inputs/outputs	EM2BIO8EXBX

Note: This controller has 1 slot for plug-in modules.

Functions and protections

The described product fully supports the following functions and protections as defined by ANSI (American National Standards Institute):

Description	ANSI code	Description	ANSI code
Over voltage	59	Over current*	50 + 51
Under voltage	27	Overload	32
Voltage asymmetry and Phase rotation**	47	Power factor	55
Over frequency	81H	Temperature	49T
Under frequency	81L	Gas (fuel) level	71

^{*} Short current only

Certificates and standards

- ► EN61000-6-2
- ► EN 61000-6-4
- ► EN 61010-1
- ► EN 60068-2-1 (-20 °C/16 h for std version)
- EN 60068-2-2 (70 °C/16 h)
- EN 60068-2-6 (2÷25 Hz/±1,6 mm; 25÷100 Hz/4,0 g)
- EN 60068-2-27 (a=500 m/s²; T=6 ms)
- ► EN 60068-2-30:2005 25/55°C, RH 95%, 48hours
- EN 60529 (front panel IP65, back side IP20)







^{**} Phase rotation only, fixed setting