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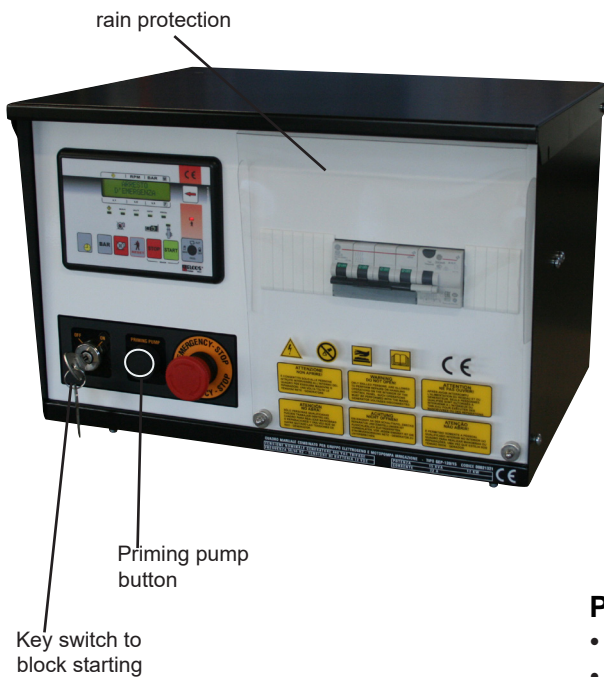
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Технические характеристики на комбинированные панели управления независимыми генераторными установками и насосами СЕМ-120/10, GEP-120 компании **ELCOS**

CONTROL PANELS COMBINED FOR CONTROL OF INDEPENDENT GENERATOR SET AND IRRIGATION PUMP

These perform the control and operation function of a generator set and an irrigation motor pump.

PANEL TYPE	Thermal-magnetic circuit breaker with differential module A	kVA	A	CONTACTOR CAPACITY A (AC1)	V
GEP-120/11	16	11	16	30	12
GEP-120/17	25	17	25	30	
GEP-120/22	32	22	32	45	
GEP-120/28	40	28	40	45	



Dimensions mm
(LxHxW) 455x300x355

Panel Composition:

- Epoxy powder-coated electrogalvanized sheet metal structure
- CEM 120 type control unit
- Thermal-magnetic circuit breaker
- Differential module
- 16 A 2P+E socket
- 32 A 3P+N+E socket
- Rain protection
- Generator contactor
- Emergency button
- Water pump electronic pressure switch
- Priming pump button (on request)
- Key switch to block starting

TECHNICAL DATA

Rated generator voltage		400Vac $\pm 10\%$; frequency 50 to 60Hz
Battery supply voltage		12Vdc (16Vdc max)
Consumption with engine stopped (STAND BY)		4mA at 12V
Consumption with engine stopped and emergency button pressed		190mA at 12V
Maximum consumption		265mA at 12V
Rated insulation voltage:	terminal board at genset voltage	450V
	terminal board at battery voltage	32V
Insulation class		Class 1
Hour meter		4 digits
Battery voltmeter		Max 38V precision $\pm 2\%$
Generator voltmeters		Max 476V precision $\pm 1\%$ measurement range 10 to 253Vac
Ammeters		Max 2400A ac, precision $\pm 1\%$ Measurement range 0.02 (20mA) to 6A ac
Frequency meter		Max 85Hz, precision $\pm 0.1\text{Hz}$ Frequency range 45 to 85Hz
Precision of voltammeter and power factor meter		$\pm 2\%$
Precision of wattmeter, varmeter, and kilowatt-hour		$\pm 4\%$
Precision of following instruments: oil pressure gauge, water thermometer, fuel level		$\pm 2\%$
Tachometer		Max 4000 RPM precision ± 10 RPM
Serial communication parameters		9600 baud, 8 data bits, 1 stop bit, even parity
Capacity of mains/genset contactor contacts		250Vac 3A (AC1)
Maximum load on outputs	17 (stop)	1.5A
	19 (key), 6 (glow plugs), 15 (starting), 70 (general alarm)	0.25A
Temperature limits		-20 to +40°C
Relative humidity		90% MAX (non-condensing) at 40°C
Maximum altitude		1000m a.s.l.
Degree of protection:		IP33
Operation		as standalone
Installation system to which it is connected		TN-IT-TT
Installation conditions		For external use
Dimensions (mm)		L=455 D=355 H=300
Weight GEP-120/11 /17 /22 /28		13 kg 13 kg 14 kg 15 kg

LIST OF COMPONENTS FOR GEP-120/11-17-22-28 kVA

DESCRIPTION	TYPE	CODE ELCOS	MANUFACTURER	QUANTITY
ELECTRONIC CONTROL UNIT	CEM-120	40242297	ELCOS	1
FUSE HOLDER	10,3X38	70450833	WIMEX	6
FUSES OF VARIOUS TYPES	10,3X38	-		6
TERMINALS (AUX)	CBC-2,5	70421782	CABUR	5
TERMINALS (POWER)	CBC-10 (GEP-120/11) (GEP-120/17)	70421786		4
	CBC-16 (GEP-120/22) (GEP-120/28)	70421790		
BUTTON WITH LOCK	2NC ER 696 5	70100881	ABB	1
RELAY	AV04 80A 12V	40340343	EXPANSION	2
KEY SWITCH	Q13010	70602501	A.M.A.	1
CURRENT TRANSFORMERS	TAIBB 40/5 (GEP-120/11) (GEP-120/17) (GEP-120/22)	70512399	I.M.E	3
	TAIBB 50/5 (GEP-120/28)	70512400		
CONTACTOR GENERATOR	AF16400013 4P 30A AC1 100-250VAC/DC (GEP-120/11) (GEP-120/17)	70100825	ABB	1
	AF26400013 AP 45A AC1 100-250VAC/DC (GEP-120/22)	70100826		
	AF26400013 4P 45A AC1 100-250VAC/DC (GEP-120/28)	70100826		
OVERLOAD SWITCH	4P C 16A 6KA S529211 (GEP-120/11)	70100961	ABB	1
	3SB71-63N 25A (GEP-120/17)	70100537		
	3SB71-63N 32A (GEP-120/22)	70100538		
	3SB71-63N 40A (GEP-120/28)	70100539		
DIFFERENTIAL LOCK	4P 40A 300mA B427946 (GEP-120/11) (" 120/17) (" 120/22) (" 120/28)	70100980		1
SOCKET 16A 2P+T	7001Q	70800401	ROSI	1
SOCKET 32A 3P +N+T	7006Q	70804497		1
CONNECTOR KIT	1+2X12VIE	40804506	ELCOS	1
TRANSMETTEUR PRES-SION EAU POMPE TYPE TPA-200	TPA-200	70500255		
REDUCTION F1/4" GAS -M3/8"GAS		70190241		

LIST OF ON REQUEST COMPONENTS (PUMP PRIMING)

DESCRIPTION	TYPE	CODE ELCOS	MANUFACTURER	QUANTITY
PUMP CONTACTOR	AF16400013 4P 30A AC1 100-250VAC/DC	70100825	ABB	1
FUSE HOLDER	10,3X38	70450833	WIMEX	3
FUSES	10,3X38 4A	70400304		3
BLACK BUTTON	2NC ER 696 5	70100881	ABB	1
TERMINALS	CBC-4	70421784	CABUR	3

DATA FOR ORDERING

Type	Code
GEP-120/11	00021320
GEP-120/17	00021321
GEP-120/22	00021322
GEP-120/28	00021323

SUPPLIED ACCESSORIES

	Code
Connector Kit 1 + 12 ways	40804506

ACCESSORIES ON REQUEST

	Code
PRIMING PUMP KIT	40100056

COMBINED CONTROL UNIT FOR CONTROLLING AN INDEPENDENT GENERATOR SET AND IRRIGATION MOTOR PUMP TYPE CEM-120

This monitors and controls a generator set and an irrigation motor pump and allows connection of the generator contactor.



Complete with display to display the INSTRUMENTS:

- pump water pressure gauge
- three ammeters
- three voltmeters
- frequency meter
- wattmeter (1)
- varmeter (1)
- voltammeter (1)
- power factor meter
- kilowatt-hour
- fuel level indicator
- battery voltmeter
- water and oil thermometer
- oil pressure gauge
- total hour meter
- partial hour meter
- start-up counter
- failure to start counter
- tachometer

GENERATOR

(1) TOTAL AND PER PHASE

- Pump water pressure control.
- Switching off of pump water protection device.
- Automatic monitoring of faults with messages on the display.
- Texts in 6 languages: Italian, English, French, German, Spanish and Portuguese.
- Remote control (start-up and stop).
- Management of glow plug preheating.
- Clock for programming the starting or stopping of the machine.
- Indication of preventive maintenance operations.
- Programmable weekly self-test.
- Inputs for fully programmable available fault.
- Possibility to start the generator set with battery with low charge.
- Three-phase voltmeter check - minimum, maximum voltage, asymmetry and incorrect phase sequence of the generator.
- Fault log (the data of the last 100 faults that occurred are collected).

COMMUNICATION MODES OF THE CEM-120

- Serial port RS232.
- GSM Modem (optional), possibility to display, with a mobile phone, the instruments of the control unit, control starting and stopping and notify with an SMS message when the generator set is in alarm condition.

TECHNICAL DATA

Battery power supply	12 Vdc and 24 Vdc
Supply voltage	8 to 32V
Consumption with stopped engine (STAND BY)	4mA at 12V, 3 mA at 24V
Consumption with stopped engine with modem connected (STAND BY)	85mA at 12V, 45mA at 24V
Consumption with stopped engine and pressed emergency button	190 mA at 12V, 110 mA at 24V
Maximum consumption	265 mA at 12V, 150 mA at 24V
Suitable for generators with nominal voltage of	220 to 450 Vac $\pm$ 10%; frequency 50 to 60Hz
Rated insulation voltage: - Terminal board at genset voltage - Terminal board at battery voltage	500V 32V
Maximum load on outputs	15 (start-up) 3W, 17 (stop) 7W, 19 (key) 3W, 6 (glow plugs) 3W, 70 (general alarm) 3W.
Timer	1' to 96h
Rear degree of protection	IP00
Front degree of protection	IP64
Temperature limits	-20 to +50°C
Weight	430 g
Dimensions (LxHxD) mm	157x109x74
Hole mm	88x137
Hour meter	5 digits
Precision of instruments: oil pressure gauge, water thermometer, fuel level, pump water pressure gauge	2%
Generator voltmeter	Max 476V, precision $\pm$ 1% measurement range 10 to 253 Vac (neutral phase) 18 to 476 Vac (phase-phase)
Nominal current of generator ammeter	5 A
Generator ammeter	Max 2400 A, precision $\pm$ 1% measurement range 0.02 (20mA) to 6 A
Frequency meter	precision $\pm$ 0.1 Hz frequency range 45 to 85Hz
Precision of voltammeter and power factor meter	$\pm$ 2%
Precision of wattmeter, varmeter and kilowatt-hour	$\pm$ 4%
Tachometer	Max 4000 RPM precision $\pm$ 10 RPM
Pump water pressure gauge	0 to 21 bar
PUMP WATER PRESSURE TRANSMITTER: • MAXIMUM ALLOWED PRESSURE • WITH PRESSURE 4 to 14 bar differential • WITH PRESSURE 1 to 4 bar differential	21 bar 2 bar 1 bar
Serial communication parameters	9600 baud, 8 data bits, 1 stop bits; parity EVEN

DATA FOR ORDERING

Type CEM-120

code 00242297

SUPPLIED ACCESSORIES

- MUCEM-120 KIT	CODE 40804483
- WITH CABLE TPA 200	" 40500254
- PUMP WATER PRESSURE TRANSMITTER TYPE TPA-200	CODE 70500255
- NIPPLE F1/4" GAS -M3/8"GAS	CODE 70190241

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