









FEATURES OF THE CONTROL UNITS









								
	CEM7G	CEA7G	M6	CEM7	CEC7	CEA7	CEM7 + CEC7	M7X
Genset readings	Voltage between phases	●	●	●	●	●	●	●
	Voltage between phase and neutral	●	●	●	●	●	●	●
	Currents	●	●	●	●	●	●	●
	Frequency	●	●	●	●	●	●	●
	Apparent power (kVA)	●	●	●	●	●	●	●
	Active power (kW)	●	●	●	●	●	●	●
	Reactive power (kVAr)	●	●	●	●	●	●	●
	THD	●	●	●	●	●	●	●
	Power Factor	●	●	○	●	●	●	●
Mains Readings	Voltage between phases	●	●	●	●	●	●	●
	Voltage between phase and neutral	●	●	●	●	●	●	●
	Currents	●	●	●	●	●	●	●
	Frequency	●	●	●	●	●	●	●
	Apparent power	●	●	●	●	●	●	●
	Active power	●	●	●	●	●	●	●
	Reactive power	●	●	●	●	●	●	●
	THD	●	●	●	●	●	●	●
	Power Factor	●	●	●	●	●	●	●
Engine Readings	Coolant temperature	●	●	●	●	●	●	●
	Oil pressure	●	●	●	●	●	●	●
	Fuel level (%)	●	●	●	●	●	●	●
	Battery voltage	●	●	●	●	●	●	●
	R.P.M.	●	●	●	●	●	●	●
	Battery charge alternator voltage	●	●	●	●	●	●	●
Engine Protection Devices	High water temperature	●	●	○	●	●	●	●
	High water temperature by sensor	●	●	●	●	●	●	●
	Low engine temperature by sensor	●	●	●	●	●	●	●
	Low oil pressure	●	●	○	●	●	●	●
	Low oil pressure by sensor	●	●	●	●	●	●	●
	Low water level	●	●	●	●	●	●	●
	Unexpected stop	●	●	●	●	●	●	●
	Fuel reserve	●	●	○	●	●	●	●
	Fuel reserve by sensor	●	●	●	●	●	●	●
	Stop failure	●	●	●	●	●	●	●
	Battery voltage failure	●	●	●	●	●	●	●
	Battery charging alternator failure	●	●	○	●	●	●	●
	Overspeed	●	●	○	●	●	●	●
	Under frequency	●	●	●	●	●	●	●
	Start-up failure	●	●	●	●	●	●	●
Emergency Stop	●	●	●	●	●	●	●	
Low input pressure	●	●	●	●	●	●	●	

● Standard ○ Optional ○(A) Warning alarm without engine having stopped ○(P) Alarm with engine stopped

CEC7: feature available by adding CEC7 to the installation

Note: All the protections can be programmed to perform "Warning" or "Stop engine WITH or WITHOUT cooling".

The AS5+CC2 configuration will have all the functionality of the CEM7 control unit plus the grid readings of the CEC7 control unit.

									
		CEM7G	CEA7G	M6	CEM7	CEC7	CEA7	CEM7 + CEC7	M7X
Alternator Protection Devices	High frequency	●	●	Ⓟ	●	●	●	●	●
	Low frequency	●	●		●	●	●	●	●
	High voltage	●	●		●	●	●	●	●
	Low voltage	●	●		●	●	●	●	●
	Short-circuit	●	●		●	●	●	●	●
	Asymmetry among phases	●	●		●	●	●	●	
	Incorrect phases sequence	●	●		●	●	●	●	
	Reverse Power	●	●		●	●	●	●	
	Power	●	●		●	●	●	●	
	Overload	●	●		●	●	●	●	●
	Winding temperature	●	●		●	●	●	●	
	Unit signal failure	●	●		●	●	●	●	●
Counters	Total hour counter	●	●		●	●	●	●	●
	Partial hour counter	●	●		●	●	●	●	
	Kilowatt meter	●	●		●	●	●	●	
	Valid start-up counter	●	●		●	●	●	●	●
	Unsuccessful start-up counter	●	●		●	●	●	●	●
	Maintenance	●	●		●	●	●	●	●
	Power (Genset)	●	●		●	●	●	●	●
Communications	Power (Mains)		●			●	●	●	
	Modbus TCP	⓪	⓪		⓪	⓪	⓪	⓪	
	Modbus RS485	⓪	⓪		⓪	⓪	⓪	⓪	
	CCLAN Ethernet	⓪	⓪		⓪	⓪	⓪	⓪	
	Fleet Manager (C2CLOUD required)	⓪	⓪		⓪	⓪	⓪	⓪	⓪
	C2CLOUD Modem GSM/3G	⓪	⓪		⓪	⓪	⓪	⓪	
	Remote screen	⓪	⓪		⓪		⓪	⓪	
	Remote signal	⓪	⓪		⓪ (8+4)		⓪ (8+4)	⓪ (8+4)	
	SNMP	⓪	⓪		⓪	⓪	⓪		
J1939	⓪	⓪		⓪		⓪	⓪	M7XJ	
PROFIBUS	⓪	⓪		⓪	⓪	⓪	⓪		
Performance	Alarm history	●	●		10 ⓪ (+100)	●	●	●	●
	External start-up	●	●	●	●	●	●	●	●
	Start-up inhibited	●	●		●	●	●	●	●
	Start-up due to mains failure	●	●		● (CEC7)	●	●	●	
	Start-up by EJP regulations	●	●			●	●	●	
	Control of pre-heating of engine	●	●	●	●	●	●	●	●
	Enabling the genset contactor	●	●	●	●	●	●	●	●
	Mains and Genset breaker activation		●			●	●	●	
	Control of the transfer of fuel				●	● (CEM7)	●	●	●
	Control of the engine temperature	●	●		●	● (CEM7)	●	●	
	Forced genset operation	●	●		●	● (CEM7)	●	●	●
	Free programmable alarms	●	●		●	● (CEM7)	●	●	●
	Genset start-up in test mode function	●	●		●	●	●	●	
	Genset in reserve	●	●		●	●	●	●	
	Smoke control start-up	●	●		●		●	●	
	Start-up by load demand	●	●		●	●	●	●	
	Load shedding	●	●		●		●	●	
Dummy load	●	●		●		●	●		
Multilingual	●	●		●		●	●	SYMBOLS	
Special Applications	GPS location	●	●		⓪	⓪ (CEM7)	⓪	⓪	
	Genset/Genset Synchronisation				⓪ (PHP7)				
	Genset/Grid Synchronisation						⓪ (PHP7)		
	RAM7	●	●		⓪	⓪ (CEM7)	⓪	⓪	
	Repetitive panel	●	●		⓪	⓪ (CEM7)	⓪	⓪	
	Timer	●	●		⓪	⓪ (CEM7)	⓪	⓪	