<b>TECHNICAL DA</b>	TA COMMON TO ALL SERIES IN STANDARD CONFIGURATION
Enclosure	Made of steel sheet, protected against corrosion by phosphating and epoxy powder coating. Colour RAL 7035. External degree of protection: panel type G3E, G4E <b>[P30</b> ; G4RM <b>[P40</b> ; G6E, G8E, G9E <b>[P31</b> Internal degree of protection panels with interlocked switch-disconnector IP20 live parts IP 20 protection in additional modules In the G6, G8 and G9 cabinets, capacitor banks are assembled on drawers that can be pulled out from the front of the cabinet for quick maintenance G6, G8, G9 cabinets are equipped with eyebolts for lifting
Installation	Indoor installation, in a well ventilated position free from solar radiation. Pollution degree 1 Working temperature: -5 / +40 °C; Relative humidity RH50% @40°C (EN61435-1) Altitude: <1000 asl
Main Disconnector	Three-phase off-load disconnector with door interlock.
Wiring	Internal connections are made with FS17-450/750Vi nsulated flame-retardant lows moke emission callies. On non- preinsulated cable lugs, the connection point is covered with a durable heat-shrink sleeve. Auxiliary circuits are appropriately identified in accordance with current standards.
Bank insertion	The banks are driven by three-phase contactors (Class AC6-b). Series without tuning reactor have contactors with a pre-insertion resistor to limit peak inrush current Staticinsertion series are fitted with thyristor insertion modules controlled by moroprocessor such that switching on/off occurs when the potential difference between the mains and the capacitors is zero (zero crossing). The switching time for the insertion of the capacitor banks is approximately 200 ms.
Fuses	The capacitive banks are protected by high breaking capacity fuses (100k A). The protection system for the power circuits uses NH-00 curve gG fuses; for the auxiliary circuits sectionable fuse holders and 10.3x38 fuses.
Auxiliary circuits	400 Vac for G3E, G4E, G4RM 230 Vac for G6E, G8E, G9E Internal transformer
Impulse withstand	6 kV for type G3E, G4E; 8 kV for G4RM, G6E, G8E, G9E
Capacitors	S ng e-phase capacitors made of self-healing metallised polypropylene (MKP), equipped with over-pressure device and discharge resistance. Impregnated with PCBs-free vegetable oilf. Delta connection. Continuous duty type. - overvoltage: 1.1 x Un (8h / 24h) - current overload: 1.3 x In

- capacitance tolerance: -5% / +10%.

Tuning reactor (where present)	Iron core with oriented crystals; aluminium windings Resin impregnation Dissipation loss (average): 6W/kvar Over-temperature control probe
Controller	Electronic, measurement type: varmetric on 4 quadrants. Current signal: via current transformer (user-supplied) with 5A secondary, class 1 Current signal sensitivity: 2.5% for BMR series, 0.3% for HPR series
Ventilation	Natural for series without de-tuning chokes with power below 200 kvar. Forced by high-efficiency fans with top expulsion for others
CCS	remote monitoring system for real time data display, emailing of alarms, historical data storage. Included on DMP- FTV, AAR/6, AAR/D20 series; on request on other series The symbol 🛱 indicates that the equipment is equipped with CCS The symbol 🛠 indicates that the CCS system is installable on the equipment
Safety	Automatic equipment shut-down in case of high THDi, over-temperature >50°C, under and overvoltage. bank shut down for reactor overtemperature (where fitted) Dry contact NC for extreme internal temperature (>70°C) In addition on HPR controller: auto shut-down for high THDu, loss of capacitance of the bank
Testing	100% of the equipment undergoes visual inspection phase-to-phase and phase-to-ground insulation tests, bank efficiency and ventilation dircuit checks. Capacitors are tested for capacitance, dissipation factor [tar( $\delta$ )], verification of insulation to earth and overvoltage resistance at three consecutive points of the production process after winding during ageing process and at find assembly
Regulation	Capacitors: IEC/EN 60831-1 / 2 certified by IMQ (V1927) Equipment: IEC/EN 61439-1 / 2, IEC/EN 61921; 2014/35/EC Electromagnetic compatibility: 2014/30/EC.

## ED 02.64.ENG REV.6 - ED 03/25 - Cod. 383022301



# GE 230V

#### Automatic power factor correction



**GE 230V** s et es pow e factor correction pan es ar esuitabl efor thr exphas e230V n eworks with **low harmonic** current **content.** These devices guarantee accurate power factor correction, thanks to a multi-step logic that effectively fractionates the power.

## PERFORMANCE DATA

Ratedvoltage	230 Vac (others on request)
Rated frequency	50 Hz (60 Hz on request)
Insulation voltage	690 Vac
Voltage overload	1.1 Un (rated voltage)
Capacitors	Un=230; Umax 255

#### HARMONIC CONTENT RESONANCE NOT ADMITTED

THD(I)max. = 25 %	in the grid
THD(lc)max. = 70 %	on capacitors

Code	Туре	Qn	Cable entry	In	bank power	Steps	Disconnector	Controller	CCS	Weigh t
		(kvar)		(A)	(kvar)	(n)	(A)	(type)		(kg)
8571232125108	G3E	12,5	2	31	2,5+2x5	5	80	BMR6		16
8571232175100	G3E	17,5	2	44	2,5+5+10	7	80	BMR6		23
8571232250100	G3E	25	2	62	5+2x10	5	125	BMR6		26
8571232375108	G4E	37,5	2	94	2,5+5+10+20	15	200	BMR6		46
8571232550208	G4RM	55	2	138	5+10+2x20	11	200	BMR6		89
8571232750208	G4RM	75	2	188	5+3x10+2x20	15	315	BMR6		95
8571232950208	G4RM	95	2	238	5+10+4x20	19	400	BMR6		102
8571233115209	G6E	115	Ļ	288	5+10+3x20+40	23	500	HPR6	*	175
8571233140209	G6E	140	Ļ	351	2x10+2x20+2x40	14	630	HPR6	*	192
8571233160209	G6E	160	Ļ	401	4x20+2x40	8	630	HPR6	*	207
8571233180209	G6E	180	Ļ	452	7x20+1x40	10	800	HPR6	*	240
8571233200209	G6E	200	Ļ	502	2x20+4x40	10	800	HPR6	*	255

### STANDARD CONFIGURATIONS

#### Note

- For dimensions, please refer to the mechanical drawings section, referring to the 'Type' column.
- The cable entry (power supply) legend is as follows: ↑ from below, ∠ side up, ↓ from above,
- Rated power is expressed at rated voltage (Un)
- Indicates that the equipment is equipped with CCS
- 🛠 indicates that the CCS system is installable on the equipment