TECHNICAL DATA COMMON TO ALL SERIES IN STANDARD CONFIGURATION

Enclosure	Made of steel sheet, protected against corrosion by phosphating and epoxy powder coating. Colour RAL 7035. Segregazione: form 1 External degree of protection: panel type G3E, G4E IP30; G4RM IP40; G6E, G8E, G9E IP31 Internal degree of protection: panels with interlocked switch-disconnector IP20 on 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 Altitude: <1000 asl
Main Disconnector	Three-phase off-load disconnector with mechanical door interlock.
Wiring	Power connections are made with FS17-450/750V insulated, flame-retardant low smoke emission cables. 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 Static insertion series are fitted with thyristor insertion modules controlled by microprocessor 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 (100kA). 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	Single-phase capacitors made of self-healing (SH) metallised polypropylene (MKP) Over pressure safety device — Discharge resistor (75V within 3') PCB-free vegetable oil impregnation — Delta connection. Continuous service — Overvoltage: 1.1 x Un (8h / 24h) Current overload: 1.3 x In — Capacitance tollerance: -5% / +10% Dissipation losses: ≤0.4 W/kvar — Temperature category: -25 / D In the higher-performance series, **'Heavy Duty'** capacitors made of high thickness film and multiple elements in series are installed to reduce the effect of high currents on the element heads
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 and power below 200 kvar. Forced by high-efficiency fans with top expulsion for all other equipment
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 THD(I), 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 THD(U), 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 circuit checks. Capacitors are tested for capacitance, dissipation factor [tan(δ)], verification of insulation to earth and overvoltage resistance at three consecutive points of the production process: after winding, during ageing process and at final 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.

B15

Automatic power factor correction



The B15 series are suitable for three-phase networks with an operating voltage of **400 Vac and low harmonic content**. Suitable for small users and tertiary sector with daily work cycles (8h)

PERFORMANCE DATA

- **Rated voltage** 415 Vac (others on request)
- **Rated frequency** 50 Hz (60 Hz on request)
- **Insulation voltage** 800 Vac
- **Voltage overload** 1.1 Un (rated voltage)
- **Capacitors** Un=415; Umax 450

HARMONIC CONTENT

RESONANCE NOT ADMITTED

THD(I)max. = 15%. in the grid

THD(Ic)max. = 50 % on capacitors

STANDARD CONFIGURATIONS

Code	Type	Qn	Cable entry	In	bank power	Steps	Disconnector	Controller	CCS	Weight
		(kvar)		(A)	(kvar)	(n)	(A)	(type)		(kg)
8631412102320	G3E	10,2	↙	14	3x3,4	3	40	BMR4		14
8631412159320	G3E	15,9	↙	22	3,4+2x6,25	5	40	BMR4		15
8631412221320	G3E	22,15	↙	31	3,4+6,25+12,5	7	80	BMR4		16
8631412310320	G3E	31,25	↙	43	6,25+2x12,5	5	80	BMR4		18
8631412435320	G3E	43,75	↙	61	6,25+12,5+25	7	100	BMR4		22
8631412500320	G3E	50	↙	70	2x12,5+25	4	100	BMR4		23
8631412625320	G3E	62,5	↙	87	12,5+2x25	5	160	BMR4		26
8631412750320	G4E	75	↙	104	2x12.5+2x25	6	200	BMR4		38
8631413100400	G4E	100	↙	139	2x12,5+25+50	8	200	BMR4		43
8631413125325	G4RM	125	↙	174	25+2x50	5	250	BMR4		80
8661413150325	G4RM	150	↙	209	2x25+2x50	6	315	BMR4		85
8661413175325	G4RM	175	↙	243	25+3x50	7	400	BMR4		87
8661413200325	G4RM	200	↙	278	2x25+50+100	8	400	BMR4		89
8661413225325	G4RM	225	↙	313	25+2x50+100	9	500	BMR4		95
8661413250325	G4RM	250	↙	348	25+50+75+100	10	500	BMR4		102
8661410000325	G6E	300	↓	417	25+50+3x75	12	630	HPR6	🛠	175
8661410050325	G6E	350	↓	487	50+4x75	9	800	HPR6	🛠	192
8661413400325	G6E	400	↓	556	2x50+4x75	14	800	HPR6	🛠	207
8661413450325	G6E	450	↓	626	3x50+2x75+150	16	1000	HPR6	🛠	240
8661413500325	G6E	500	↓	696	50+4x75+150	13	1000	HPR6	🛠	255
8631413525420	G8E	525	↑	731	7x75	7	1250	HPR12	🛠	315
8631413600420	G8E	600	↑	836	8x75	8	1250	HPR12	🛠	330
8631413675420	G8E	675	↑	940	7x75+150	9	1600	HPR12	🛠	350
8631413750420	G8E	750	↑	1045	6x75+150	10	1600	HPR12	🛠	380
8631413825420	G8E (II)	825	↑	1149	5x75+3x150	11	800+1000	HPR12	🛠	510
8631413900420	G8E (II)	900	↑	1254	4x75+4x150	12	1000+1000	HPR12	🛠	530
8631413975420	G8E (II)	975	↑	1358	3x75+5x150	13	1000+1250	HPR12	🛠	550
8631414105420	G8E (II)	1050	↑	1462	2x75+6x150	14	1000+1250	HPR12	🛠	650
8631414120420	G8E (II)	1200	↑	1671	2x75+5x150+300	16	1250+1250	HPR12	🛠	690
8631414135420	G8E (II)	1350	↑	1880	2x75+4x150+2x300	18	1600+1250	HPR12	🛠	730

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