



			EMR4-A400-1	EMR-A300-1-C, EMR4-A500-1-D				EMR4-A400-1	EMR-A300-1-C, EMR4-A500-1-D
General					Measuring circuits				
Standards			IEC/EN 60255-6, EN 61557, UL, CSA, GL	IEC/EN 60255-6, IEC255-6, UL, CE	Monitoring voltage	U_n	V AC	380 – 415	
Lifespan, mechanical			30	30	Frequency		Hz	50	50/60 ± 10 %
Climatic proofing			Damp heat, cyclical to IEC 60068-2-30: 24 h cycle, 55° C, 93% relative humidity, 96 h		Phase imbalance level adjustable		%	5 – 15	2 – 15, from mean value of phase voltage
Ambient temperature					Switching hysteresis		%	20	20
Open			–20...60	–20...60	Temperature error		%/°C	0.06	0.06
Storage			–40...80	–20...60	Error within supply voltage		%	0.5	0.5
Mounting position			As required	As required	Status indication				
Shock resistance			10 g	IEC/EN 60255-21-12, Class 12	Output relay energized			LED, yellow	LED green: R flashes
Degree of protection					Supply voltage				LED green: R on
Terminals			IP 20	IP 20	Phase failure				LED red: F1 on, F2 flashes
Enclosures			IP 50	IP 50	Phase sequence error				LED red: F1, F2 flashes
Weight			0.3	0.13	Relay output contacts				
Terminal capacities					Rated operational voltage	U_e	V AC	500	500
Solid			2 × 2.5		Rated operational current				
Flexible with ferrule			2 × 2.5	2 × 2.5/2 × AWG14	AC-12 at 230 V	I_e	A	4	4
Standard screwdriver			5.5 × 0.8	5.5 × 0.8	AC-15 with 230 V	I_e	A	3	3
Tightening torque			0.5 – 0.8	0.5 – 0.8	DC-12 at 24 V	I_e	A	4	4
Fixing			Snap fixing, top-hat rail IEC/EN 60715		DC-13 at 24 V	I_e	A	2	2
Contacts					Lifespan, electrical (AC-12/230 V/4 A)	Operations	× 10 ⁶	0.3	0.1
Rated impulse withstand voltage			4000	4000	Short-circuit rating				
Overvoltage category/pollution degree			III/3	III/3	max. fuse	Fast/gL	A	10	10
Rated insulation voltage			600	600	Load limit curves			→ Engineering	
Power supply					Electromagnetic compatibility (EMC)				
Supply voltage AC			380...415	160...300...500	Electromagnetic compatibility			IEC/EN 60947-6-2	
Voltage tolerance			0.8 – 1.2	0.8 – 1.2	ESD			IEC/EN 61000-4-2 level 3	
Power consumption			15	20	HF-immunity to radiation			IEC/EN 61000-4-3 level 3	
Rated frequency			50	50	Burst			IEC/EN 61000-4-4 level 3	
Duty factor			100	100	Surge			IEC/EN 61000-4-5 Level 4	
Timing cycle					HF-immunity to line-conducted interference			IEC/EN 61000-4-6 level 3	
Response delay time			0.5 indication of phase balance	Adjustable from 0.1 – 10 s					
Time error within supply voltage			0.5	0.5					
Time error within temperature range			0.06	0.06					