
















Panasonic
ideas for life




POWER SOLUTIONS
FOR PHOTOVOLTAIC APPLICATIONS



Solutions for solar applications

Solar relays				Tilt sensors		
Market	Residential buildings	Office buildings	Solar tracking systems	Concentrated photovoltaic systems	Concentrated PV	Focussed thermal solar troughs
						
Product	LF-G Relays 22-31 A, 250 V AC	HE Relays 30-48 A, 250 V AC	EP Relays 20-300 A, 1000 V DC		GF/GS 1-, 2-axis tilt sensors	
						

Inverter relays for the AC side						
Market	Residential buildings			Office buildings		
Solar inverter power	1-4 kW	5-7 kW	5-7 kW NEW	6-8 kW	8-10 kW	
<th>Relays</th> <td style="text-align: center;">LF-G1 22 A</td> <td style="text-align: center;">LF-G2 31 A</td> <td style="text-align: center;">JT-G 20-25 A</td> <td style="text-align: center;">HE 30 A</td> <td style="text-align: center;">HE 48 A</td>	Relays	LF-G1 22 A	LF-G2 31 A	JT-G 20-25 A	HE 30 A	HE 48 A
<ul style="list-style-type: none"> • compact • VDE 0126 compliant • low holding power • long lifetime • reliable • available 						
Contact distance	Min. 1.5 mm	Min. 1.5 mm	Min. 1.85 mm	Min. 2.5 mm	Min. 2.5 mm	
Switching capacity	22 A, 250 V AC 30 kops	31 A, 250 V AC 30 kops	20-25 A, 250 V AC 30 kops	30 A, 250 V AC 200 kops	48 A, 250 V AC 30 kops	
Standards	C-UL, VDE	C-UL, VDE	VDE, UL	C-UL, VDE	C-UL, VDE	
Nominal operating power	1.4 W	1.4 W	1.1 W	1.92 W	1.92 W	
Holding power	280 mW	280 mW	300 mW	480 mW	480 mW	

Inverter relays for the DC side			
Market	Solar power stations		
Solar inverter power	10 kW or more		
<th>Relays</th> <td style="text-align: center;">EP 20 A NEW</td> <td style="text-align: center;">EP 80 A</td>	Relays	EP 20 A NEW	EP 80 A
<ul style="list-style-type: none"> • compact • VDE 0126 compliant • low holding power • long lifetime • reliable • available 			
<th>Switching capacity</th> <td>20 A, 1000 V DC</td> <td>80 A, 1000 V DC</td>	Switching capacity	20 A, 1000 V DC	80 A, 1000 V DC
<th>Nominal operating power</th> <td>3.9 W</td> <td>4.5 W</td>	Nominal operating power	3.9 W	4.5 W
		EP 200 A/300 A NEW	
			
		200 A/300 A, 1000 V DC	
		6 W	

Tilt sensors

Applications: Concentrated photovoltaic systems / Solar troughs

Analog tilt sensors for solar tracking

- Panasonic's GF1 tilt sensors can detect absolute angles
- Output analog voltage
- 1-axis
- 0.5° accuracy



Digital tilt sensors for solar tracking

- Detection of absolute angles
- Digital output (Modbus)
- 1- or 2-axis
- 0.05° accuracy



All tilt sensors are compatible with PLC solutions from Panasonic!



North America

Europe

Asia Pacific

China

Japan

Panasonic Electric Works

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