



Protection & Monitoring Relays Series

Klemsan protection and monitoring relays in new enclosures under the DIN norm, are designed to protect your system against problems caused by voltage, frequency, and temperature in single-phase and three-phase electrical systems. In addition to fixed protection models that do not require any adjustments, some products allow asymmetry, voltage protection, protection parameter selection, and time setting adjustment over trimpots on the device

- System errors can be monitored thanks to the LED notifications that indicate errors.
- Product design under TS EN 60255 standard,
- 18mm thin product body under DIN standard,
- TRMS measurement,
- Red LED indicators for error notification,
- Orange LED indicator for relay status,
- Adjustable pots for time and limit values,
- 5A SPDT relay output,
- Optionally Asymmetry, Phase Sequence, Absence of Phase, High - Low Voltage, High - Low Frequency, PTC, Neutral break protection,
- Liquid level and light intensity monitoring functions
- Star, delta, and single-phase connection options,
- High precision and high mechanical durability.

FIXED PROTECTION RELAYS

Product Name	Order No	Definition	3P4W	3P3W	Phase-Loss Protection	Phase Sequence Protection	Asymmetry Protection	PTC Input	1 C/O	1 NO	85-300 VAC (VLN)	180-265 VAC (VLN)	145-520 VAC (VLL)
FP1Y-ASF 230	270271	Motor Protection Relay	√		√	√	20%		√		√		
FP1D-ASF 400	270272	Motor Protection Relay		√	√	√	20%		√			√	
FP1Y-ASF8 230	270273	Motor Protection Relay	√		√	√	40%		√				
FP1Y-ASF8.3 230	270274	Motor Protection Relay	√		√	√	40%			√	√		
FP1Y-AF 230	270275	Motor Protection Relay	√		√		20%		√		√		
FP1Y-SF 230	270276	Motor Protection Relay	√		√	√			√		√		
FP1Y-SFP 230	270284	Motor Protection Relay	√		√	√		√	√		√		
FP1D-SFP 400	270285	Motor Protection Relay		√	√	√		√	√			√	
FP1YA-ASF8 230	270300	Motor Protection Relay	√		√	√	20%		√				√
FP1YA-ASF8.3 230	270301	Motor Protection Relay	√		√	√	20%		√				√
FP1D-SF 400	270302	Motor Protection Relay		√	√	√			√			√	

ADJUSTABLE PROTECTION RELAYS

Product Name	Order No	Definition	3P4W	3P3W	Phase-Loss Protection	Phase Sequence Protection	Asymmetry Protection	Low Voltage Protection	High Voltage Protection	Low - High Voltage Protection (Same Trimpt)	Neutral Loss Protection	Nominal Voltage (Un)	PTC Input	Adjustable On Delay	Adjustable Off Delay	1 C/O	75-250 VAC (VLN)	85-300 VAC (VLN)	130-430 VAC (VLL)	145-520 VAC (VLL)
P1Y-ASF 230	270277	Motor Protection Relay	√		√	√	±(5-30%/Off)					230V			0.1-10 sec	√		√		
P1D-ASF 400	270278	Motor Protection Relay		√	√	√	±(5-30%/Off)					400V			0.1-10 sec	√				√
P1Y-M1WASFN 170-280	270282	Motor Protection Relay	√		√	√	±(5-30%/Off)			±(5-30%/Off)	√	170-280V			0.1-10 sec	√		√		
P1D-M1WASF 295-480	270283	Motor Protection Relay		√	√	√	±(5-30%/Off)			±(5-30%/Off)		295-480V			0.1-10 sec	√				√
P1Y-M2WSP 170-280	270286	Motor Protection Relay	√		√		-(5-30%/Off)	+(5-30%/Off)				170-280V	√		0.1-10 sec	√		√		
P1D-M2WSP 295-480	270287	Motor Protection Relay		√	√	√	-(5-30%/Off)	+(5-30%/Off)				295-480V	√		0.1-10 sec	√				√
P1Y-M1WASFN 100-200	270288	Motor Protection Relay	√		√	√	±(5-30%/Off)			±(5-30%/Off)	√	100-200V			0.1-10 sec	√	√			
P1D-M1WASF 175-345	270289	Motor Protection Relay		√	√	√	±(5-30%/Off)			±(5-30%/Off)		175-345V			0.1-10 sec	√				√
P1Y-M2WSP 100-200	270290	Motor Protection Relay	√		√	√	-(5-30%/Off)	+(5-30%/Off)				100-200V	√		0.1-10 sec	√	√			
P1D-M2WSP 175-345	270291	Motor Protection Relay		√	√	√	-(5-30%/Off)	+(5-30%/Off)				175-345V	√		0.1-10 sec	√				√

VOLTAGE MONITORING RELAYS

Product Name	Order No	Definition	1P2W	3P4W	3P3W	Phase-Loss Protection	Phase Sequence Protection	Low Voltage Protection	High Voltage Protection	Low - High Voltage Protection (Same Trimpt)	Neutral Loss Protection	Nominal Voltage (Un)	Adjustable On Delay	Adjustable Off Delay	1 C/O	75-250 VAC (VLN)	85-300 VAC (VLN)	130-430 VAC (VLL)	145-520 VAC (VLL)
V1Y-WFN 230	270279	Voltage Monitoring Relay		√		√		150-210V	240-300V		√	230V	0.1-10 sec	0.1-10 sec	√		√		
V1Y-WS 300	270280	Voltage Monitoring Relay		√		√	√	150-210V	240-300V			230V	0.1-10 sec	0.1-10 sec	√				√
V1D-WS 520	270281	Voltage Monitoring Relay			√	√	√	260-360V	415-520V			400V	0.1-10 sec	0.1-10 sec	√		√		
V1Y-WUN 120-480	270292	Voltage Monitoring Relay		√		√				±(5-30%/Off)	√	120-277V	2 sec	0.1-15 sec	√				√
V1Y-WUN.9 120-480	270293	Voltage Monitoring Relay		√		√				±(5-30%/Off)	√	120-277V	2 sec	0.1-15 mins	√		√		
V1U-M2W 230	270295	Voltage Monitoring Relay	√			√		(90-115%)Un	(80-130%)Un			230V	0.1-10 sec	0.1-10 sec	√				√
V1U-M2W 120	270296	Voltage Monitoring Relay	√			√		(75-115%)Un	(80-130%)Un			120V	0.1-10 sec	0.1-10 sec	√	√			

SPECIAL FUNCTIONAL MONITORING RELAYS

Product Name	Order No	Definition	PTC Monitoring	Frequency Monitoring Range	Frequency Monitoring Voltage	Light Intensity Monitoring Range	Liquid Level Sensitivity Range	Liquid Level Probe Qty	Adjustable On Delay	Adjustable Off Delay	1 C/O	24-265 VAC/DC (VLN)	115VAC & 230VAC
K1F-WL6 50/60	270294	Frequency Monitoring		45-65Hz	85-300VLN						√	√	
FK1T-P 24-265	270297	Temperature Monitoring	√								√	√	
K1TW-D7 20K	270298	Light Intensity				1-20 lux					√	√	
K2LC-D2 115-230	270299	Liquid Level Monitoring					1-75kohm	6	0.1-10 sec	0.1-10 sec	√		√

