

## PFS - NH-safety load switching strip

Download  
data sheet



The PFS NH fuse-switch-disconnectors can be used flexibly. The strip can be conveniently rotated so that the connection can be made from below as well as from above. The strips are available in the versions 1-pole or 3-pole switchable version.

For safer operation of the measuring transformers already installed in the transducers already installed in the strip base, we offer variants with 333 mV small signal transducers. These are either connected directly to a connection cable or wired through to a plug on the back of the strip on request. For example, they can be connected directly to our compact and modular outgoing metering system.

The strips are suitable for 400 V / 690 V operating voltage. So you can use the safety edge in conjunction with our measuring devices to record an extended measuring range directly.

When the switch cover is opened, there is a parallel disconnection. This enables simpler switching for double disconnection and increases the service life and safety for the operator.



## Measured value acquisition module MEM1

As additional accessories for the PFS safety edges (NH1 - NH3), we offer as a pre-assembled set, we offer a quick and easy way to carry out complete current and voltage measurement in your existing system. Retrofitting into your existing system. The MEM1 scores points with its compact design (overall height 40 mm) and space-saving installation without major wiring effort directly on the strip. This means you have all your data of your sockets after a quick and easy installation and configuration and available via Modbus RTU.



## Technical data – NH-safety load switching strip

	PFS1-01	PFS1-02	PFS1-03
Rated operating current	250 A	400 A	630 A
Conventional thermal current with separating knife I <sub>th</sub>	400 A	630 A	800 A
Rated operating voltage U <sub>e</sub>	690 V		
Rated insulation voltage U <sub>i</sub>	1000 V		
Rated surge withstand voltage U <sub>imp</sub>	12 kV		
Rated frequency	50 ... 60 Hz		
Conditional rated short-circuit current at 500 V / 690 V	120 kA / 100 kA		
Utilisation category	AC-23B at U <sub>e</sub> = 400 V		
Mechanical service life	1400 switching cycles	800 switching cycles	800 switching cycles
Electrical service life	200 switching cycles		
Power output (without fuse links)	27 W	56 W	111 W
Max. permissible power output per fuse link	23 W	34 W	48 W
Protection type	IP20		
Ambient temperature	-25 ... 55 °C		
Rated operating mode	Continuous operation		
Degree of soiling	3		
Overvoltage category	Category IV		
V terminal cross-section	25 ... 300 mm <sup>2</sup>		
Tightening torque	35 Nm		
Width x height x depth (closed / open)	100 x 675 x 190 / 295 mm		

Size	Switchable	Connection	Current transformer	Transformer wiring	MEM1	Item number
			Primary / Secondary			
2	1-pole	V-clamp	400 A / 333 mV	Terminal strip	-	60.71.0200
2	1-pole	V-clamp	400 A / 333 mV	Connection cable	-	60.71.0204
2	1-pole	V-clamp	400 A / 333 mV	Measuring device	●	60.71.0209
2	1-pole	M12	400 A / 333 mV	Terminal strip	-	60.71.0201
2	1-pole	M12	400 A / 333 mV	Connection cable	-	60.71.0205
2	1-pole	M12	400 A / 333 mV	Measuring device	●	60.71.0208
3	1-pole	V-clamp	400 A / 333 mV	Connection cable	-	60.71.3310
3	1-pole	M12	400 A / 333 mV	Terminal strip	-	60.71.0313

Other versions available on request.

## Technical data – MEM1

		MEM1					
In- and outputs	Digital in-/outputs	none					
	Relay in-/outputs	none					
	Analogue in-/outputs	none					
	Residual current inputs	none					
	Temperature inputs	none					
Communication	Interfaces	2x RS485					
	Communication protocols	Modbus RTU					
Further functions	Alarms	Integrated logic: Limit values for exceeding/falling below freely defined values					
	Internal temperature measurement	-40 ... 80 °C					
Data logger	Storage capacity and distribution	none					
	Measured value storage	Minimum and maximum memory					
Electrical connection	Supply voltage	24 V version: 10 ... 36 V DC					
	Power consumption	1 W					
	Overvoltage category	Category IV					
Accuracy classes		Voltage:	Cl. 0.1	Current:	Cl. 0.2	Frequency:	Cl. 0.02
		Active power:	Cl. 1	Reactive power:	Cl. 2	Apparent power:	Cl. 0.5
		Harmonics:	Cl. 1	Power factor:	Cl. 0.5	cos phi:	Cl. 0.5
		Real energy:	Cl. 1S	Reactive energy:	Cl. 2S	Apparent energy:	Cl. 0.5S
Measurement inputs	Voltage	U L-N: 8 ... 300 V AC					
		U L-L: 14 ... 520 V AC					
	Overload voltage	Overload for 1 Min. U L-N: 3000 V AC / peak overload for max 5 Sec. U L-N: 5400 V AC					
	Input impedance voltage	8,16 MOhm					
	Input load voltage	< 0.05 VA					
	Frequency	40 ... 70 Hz					
	Current transformers	3x 333 mV; Optional 3x 1 / 5 A					
	Current overload	Permanent: 666 mV AC / peak overload for max. 1 sec: 3.33 mV AC					
	Input impedance current	< 10 MOhm					
	Input load current	< 5 µVA					
	Sampling rate	6.4 kHz					
	Harmonics per order	1. ... 50. for current and voltage					
Measuring method	IEC 61000-4-30						
Mechanical properties	Operating temperature range	-25 ... 70 °C at < 95 % relative humidity					
	Temperature range bearing	-40 ... 60 °C at < 95 % relative humidity					
	Protection class front / rear	IP 40 / IP 20					
	Dimensions WxHxD	97 x 43 x 94 mm					
	Weight	0.2 kg					
Internal real-time clock	Accuracy	+/- 2 s per day at 0 ... 40 °C					
	Possible synchronisation	System frequency					
FW modules							