

- ⚡ **SPD based on isolating spark gap technology (leakage current-free valve surge protector). No need for plug-in device**
- ⚡ **Two, three resp. four pole snap-on housing for DIN rail mounting**
- ⚡ **Visual function indicator (LED)**
- ⚡ **Remote signalling contact (PK) with optional plug-in connection terminal**



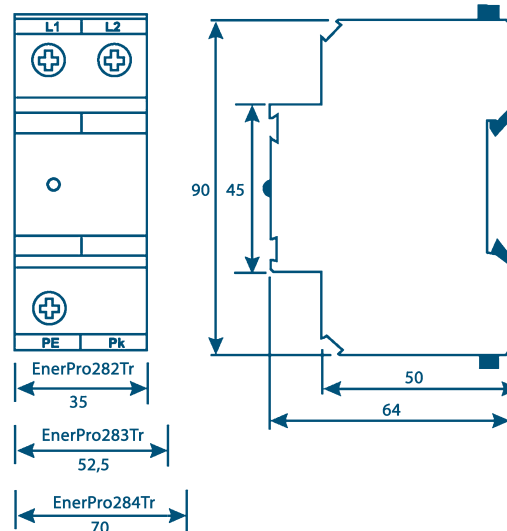
## Category C Surge Protective Device

### Product description

EnerPro282Tr, EnerPro283Tr and EnerPro284Tr are used as surge and noise voltage protectors on the supply end of electric devices and equipment. Depending on the type, it is possible to protect 2 or 3 phases and the neutral conduit with one module at a time. The devices are wired internally so that only once PE or Pk has to be connected. The protection device is placed in an easy to handle snap-on housing designed for 35 mm DIN rail mounting (according to EN 50022) with

multi-purpose terminals for wire and busbar connection.

EnerPro282Tr, EnerPro283Tr and EnerPro284Tr have thermal disconnectors which will respond should the varistors emit leak current surges due to overloading. The disconnectors are installed in such a way that, when triggered, only the surge protection is cut off the mains (no operating disruption!) In this case, the green operating mode signal is switched off and the optional remote alarm contact (PK) opens.



# Surge Protection

## EnerPro282Tr(/Pk) EnerPro283Tr(/Pk) EnerPro284Tr(/Pk)

### Technical Data

Application	● 230 V/400 V surge and noise voltage protection on DIN rail
Application area	● Main and sub-distributors

Type		EnerPro282Tr	EnerPro283Tr	EnerPro284Tr
		two-pole	three-pole	four-pole
Category			C	
Rated voltage	U <sub>c</sub> [V~]		230 V~/400	
Max. operating voltage	U <sub>max</sub> [V~]		275 V~/480	
Max. permissible line resp. backup fuse	I [A]		100 gL	
Leak current at U <sub>max</sub> . (L-PE, N-PE)				
- ohmic share	I <sub>L</sub> [μA]		≤ 1.0	
- capacitive share at 50 Hz	I <sub>L</sub> [μA]		≤ 1.0	
Protection level at 1 kV/μs (L-PE, N-PE)	U <sub>as</sub> [kV]		≤ 1.4	
Protection level at i <sub>sn</sub> (L-PE, N-PE)	U <sub>p</sub> [kV]		≤ 1.4	
Response time	t <sub>A</sub> [ns]		≤ 25	
Nom. impulse discharge current Ader-Erde (8/20 μs)	i <sub>sN</sub> [kA]		10 x 15	
Max. impulse discharge current (8/20 μs)	i <sub>n</sub> [kA]		1 x 40	
Service life test current (10/700 μs)	i <sub>i</sub> [A]		500 x 100 100 x 500 1 x 1000	
Operating temperature range	T [°C]		-25 ... +85	
Max. connection wire cross sectional area (L, N and PE)	[mm <sup>2</sup> ]		50 rigid or 35 stranded	
Max. connection wire cross sectional area for remote monitoring	[mm <sup>2</sup> ]		1.5	
Housing cover / colour			Polycarbonate (halogen-free) / yellow	
Casting compound			Polyurethane	
Acc. to IEC 529 (1989) protection category			IP 20	
Mounting			35 mm rail acc. to EN 50 022	
<b>Article number</b>		<b>38 20 30</b>	<b>38 20 34</b>	<b>38 20 36</b>
with potential-free contact		<b>EnerPro282Tr/Pk</b>	<b>EnerPro283Tr/Pk</b>	<b>EnerPro284Tr/Pk</b>
<b>Article number</b>		<b>38 20 31</b>	<b>38 20 35</b>	<b>38 20 37</b>

### Diagrams

