









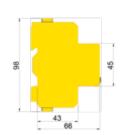
Surge Protective Devices: **ZOTUPGAP**















IA 25 230 1+1 is a ready to install assembly of two voltage switching SPDs providing two modes of protection, typically installed at the origin of the installation, e.g. in the Main Distribution Board (MDB), in single-phase 230 V TT-systems where connection type CT2 (1+1) is required according to HD 60364-5-534, with the following features and benefits:

- Impulse test classification: Test class I and II according to IEC 61643-11 Ed. 1 (2011-03) and Type 1 and 2 according to EN 61643-11 (2012-10);
- IA 25 230 1+1 is a self extinguishing spark gap and GDT based switching SPD, for the protection of low voltage installations against direct and indirect lightning effects;
- Impulse discharge current (L-N) of 25 kA 10/350 μs;
- Impulse discharge current (N-PE) of 52 kA 10/350 μs;
- High self extinguishing capability of 16 kA rms (follow current interrupt rating L-N);
- Green LED Status Indicator;
- The special housing is designed for "Pollution Degree 3".

Modes of protection (number of poles) Us 230 V ac	Model IA 25		230 1+1
Max Continuous Operating Voltage Us 255 V ac	CODE		203 121
Max Continuous Operating Voltage Uc 255 V ac I and II I I I I I I I I I	Nominal ac system voltage	Un	230 V ac
Test Class according to EK 61643-11 Ed.1 (2011-03)	Modes of protection (number of poles)		1+1 (L-N + N-PE)
Tri and T2 Impulse discharge current (10/350 μs) (L-N)	Max Continuous Operating Voltage	Uc	255 V ac
Impulse discharge current (10/350 μs) (L-N) Impulse discharge current (10/350 μs) (N-PE) Impulse discharge current (10/350 μs) (N-PE) Impulse discharge current (10/350 μs) (N-PE) Q	Test Class according to IEC 61643-11 Ed.1 (2011-03)		I and II
Impulse discharge current (10/350 μs) (N-PE)	Type according to EN 61643-11 (2012-10)		T1 and T2
Charge (L-N) Q 12,5 As Charge (N-PE) Q 26 As Nominal discharge current (8/20 μs) (L-N) In 25 kA Nominal discharge current (8/20 μs) (N-PE) In 52 kA Short Circuit Current rating with max. backup protection In 16 kA rms Follow current interrupt rating (L-N) In 16 kA rms Follow current interrupt rating (N-PE) In 100 A rms Voltage protection level (L-N, N-PE, L-PE) Up ≤ 2,00 kV ≤ 1,50 kV ≤ 2,00 kV Max. overcurrent protection fuse 315 A gG* Max. overcurrent protection for through-wiring (V-connection) 125 A gG* Max. overcurrent protection for through-wiring (V-connection) L 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N Ur 440 V / 120 min, withstand (W) Response time In 120 V / 200 ms, withstand (W) In 120 V / 200 ms, withstand (W) Response time In 10 Ω In 120 Q V / 200 ms, withstand (W) Response time In 10 Ω In 10 Ω In 10 Ω In	Impulse discharge current (10/350 µs) (L-N)	limp	25 kA
Charge (N-PE) Nominal discharge current (8/20 μs) (L-N) Nominal discharge current (8/20 μs) (N-PE) Short Circuit Current rating with max. backup protection Isc. 16 kA rms Follow current interrupt rating (L-N) Follow current interrupt rating (N-PE) In 100 A rms Voltage protection level (L-N, N-PE, L-PE) Is 100 A rms Voltage protection fuse Max. overcurrent protection fuse Max. overcurrent protection for through-wiring (V-connection) Rated Load Current (for V-connection) Behaviour in case of Temporary OverVoltage (TOV): N-PE Ur 440 V / 120 min, withstand (W) Response time Is ≤ 100 ns Insulation resistance Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity 4-35 mm² flexible / 4-50 mm² semi rigid Mounting Case material / Flammability grade Pollution degree / Degree of protection Approximate weight Dimensions: width CB, STC issued by OVE / KEMA-KEUR Additional Technical Information; for application at locations with a prospective short circuit current at the SPD's point of installation External backup fuse required	Impulse discharge current (10/350 µs) (N-PE)	limp	52 kA
Nominal discharge current (8/20 μs) (L-N) Nominal discharge current (8/20 μs) (N-PE) In 52 kA Sohrt Circuit Current rating with max. backup protection Iocor 16 kA rms Follow current interrupt rating (L-N) Follow current interrupt rating (N-PE) In 16 kA rms Follow current interrupt rating (N-PE) In 100 A rms Voltage protection level (L-N, N-PE, L-PE) U ₀ ≤ 2,00 kV ≤ 1,50 kV ≤ 2,00 kV Max. overcurrent protection fuse Max. overcurrent protection for through-wiring (V-connection) In 125 A gG* Rated Load Current (for V-connection) In 125 A gG* Rated Load Current (for V-connection) In 125 A gG* Repair (In 120 V / 120 min, withstand (W) In 1200 V / 200 ms, withstand (W) Response time Insulation resistance In 120 X / 200 kV Response time Insulation resistance Response time Insulation resistance Response time Insulation resistance Response time In 120 X / 200 kV Response time In 120 X /	Charge (L-N)	Q	12,5 As
Nominal discharge current (8/20 μs) (N-PE) Short Circuit Current rating with max. backup protection Follow current interrupt rating (L-N) Follow current interrupt rating (N-PE) In 100 A rms Voltage protection level (L-N, N-PE, L-PE) Wax. overcurrent protection for through-wiring (V-connection) Rated Load Current (for V-connection) Behaviour in case of Temporary OverVoltage (TOV): IN N-PE Ur 440 V / 120 min, withstand (W) Ur 1200 V / 200 ms, withstand (W) Response time Insulation resistance Res ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Operating temperature range / Humidity Ferminal-Conductor size (double clamps for V-connection on L-terminal) Mounting Mounting A-35 mm² flexible / 4-50 mm² semi rigid Mounting Approximate weight Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current at the SPD's point of installation External backup fuse required	Charge (N-PE)	Q	26 As
Short Circuit Current rating with max. backup protection Iscort 16 kA rms Follow current interrupt rating (L-N) In 16 kA rms Follow current interrupt rating (N-PE) In 100 A rms Voltage protection level (L-N, N-PE, L-PE) Up ≤ 2,00 kV ≤ 1,50 kV ≤ 2,00 kV Max. overcurrent protection fuse 315 A gG* Max. overcurrent protection for through-wiring (V-connection) 125 A gG* Rated Load Current (for V-connection) IL 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N Ur 440 V / 120 min, withstand (W) Response time ta ≤ 100 ns 120 V / 200 ms, withstand (W) Response time ta ≤ 100 ns 120 N / 200 ms, withstand (W) Response time ta ≤ 100 ns 120 N / 200 ms, withstand (W) Russ Insulation resistance Russ ≥ 1 G Ω 20 ns	Nominal discharge current (8/20 µs) (L-N)	l _n	25 kA
Follow current interrupt rating (L-N) Follow current interrupt rating (N-PE) In 100 A rms Voltage protection level (L-N, N-PE, L-PE) Up ≤ 2,00 kV ≤ 1,50 kV ≤ 2,00 kV Max. overcurrent protection fuse Max. overcurrent protection for through-wiring (V-connection) Rated Load Current (for V-connection) IL 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N N-PE Ur 1200 V / 200 ms, withstand (W) Response time It Sinsulation resistance Rins Insulation resistance Rins Insulation resistance Rins Rinse Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) Mounting Indicator / Rinse	Nominal discharge current (8/20 µs) (N-PE)	l _n	52 kA
Follow current interrupt rating (N-PE) Voltage protection level (L-N, N-PE, L-PE) Voltage protection level (L-N, N-PE, L-PE) Wax. overcurrent protection for through-wiring (V-connection) Rated Load Current (for V-connection) Behaviour in case of Temporary OverVoltage (TOV): L-N Wir N-PE Uir 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N Wir 1200 V / 200 ms, withstand (W) Response time In In In In In In In In In I	Short Circuit Current rating with max. backup protection	sccr	16 kA rms
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Follow current interrupt rating (L-N)	l _{fi}	16 kA rms
Max. overcurrent protection fuse 315 A gG* Max. overcurrent protection for through-wiring (V-connection) 125 A gG* Rated Load Current (for V-connection) I. 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N Ur 440 V / 120 min, withstand (W) Response time ta ≤ 100 ns Insulation resistance R _{Ims} ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade BMC / V-0 in accordance with UL 94 Pollution degree / Degree of protection PD / IP 3 / 20 (built-in) Approximate weight 395 g Dimensions: width CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating fi Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required<	Follow current interrupt rating (N-PE)	l _{fi}	100 A rms
Max. overcurrent protection for through-wiring (V-connection) 125 A gG* Rated Load Current (for V-connection) I. 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N Ur 440 V / 120 min, withstand (W) Response time ta ≤ 100 ns Insulation resistance R _{ins} ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade BMC / V-0 in accordance with UL 94 Pollution degree / Degree of protection PD / IP 3 / 20 (built-in) Approximate weight 395 g Dimensions: width CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating li Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required 315 A gG	Voltage protection level (L-N, N-PE, L-PE)	Up	$\leq 2,00 \text{ kV}$ $\leq 1,50 \text{ kV}$ $\leq 2,00 \text{ kV}$
Rated Load Current (for V-connection) IL 125 A Behaviour in case of Temporary OverVoltage (TOV): L-N N-PE UT 440 V / 120 min, withstand (W) Response time ta ≤ 100 ns Insulation resistance Rins ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade BMC / V-0 in accordance with UL 94 Pollution degree / Degree of protection PD / IP 3 / 20 (built-in) Approximate weight 395 g 395 g Dimensions: width 53 mm (3 modules) Certifications / Quality Mark CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating li 50 kA rms (tested by CTI) Max. prospective short circuit current at the SPD's point of installation 315 A gG	Max. overcurrent protection fuse		315 A gG*
Behaviour in case of Temporary OverVoltage (TOV):			
N-PE Ur 1200 V / 200 ms, withstand (W) Response time ta ≤ 100 ns Insulation resistance Rins ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade BMC / V-0 in accordance with UL 94 Pollution degree / Degree of protection PD / IP 3 / 20 (built-in) Approximate weight 395 g Dimensions: width 53 mm (3 modules) Certifications / Quality Mark CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi 50 kA rms (tested by CTI) Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required 315 A gG	Rated Load Current (for V-connection)	l _L	125 A
Response time ta ≤ 100 ns Insulation resistance R _{Ins} ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade BMC / V-0 in accordance with UL 94 Pollution degree / Degree of protection PD / IP 3 / 20 (built-in) Approximate weight 395 g Dimensions: width 53 mm (3 modules) Certifications / Quality Mark CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi 50 kA rms (tested by CTI) Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required 315 A gG	Behaviour in case of Temporary OverVoltage (TOV):	U⊤	440 V / 120 min, withstand (W)
Insulation resistance Rins ≥ 1 G Ω Status Indicator / N-PE (no disconnector) Green LED / 2 colour indication (green/red) for N-PE Operating temperature range / Humidity -40 +80 °C (extended) / 5% 95% Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade BMC / V-0 in accordance with UL 94 Pollution degree / Degree of protection PD / IP 3 / 20 (built-in) Approximate weight 395 g Dimensions: width 53 mm (3 modules) Certifications / Quality Mark CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required 315 A gG	N-PE	UT	1200 V / 200 ms, withstand (W)
Status Indicator / N-PE (no disconnector) Operating temperature range / Humidity Terminal-Conductor size (double clamps for V-connection on L-terminal) Mounting Case material / Flammability grade Pollution degree / Degree of protection Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation Green LED / 2 colour indication (green/red) for N-PE -40 +80 °C (extended) / 5% 95% 4-35 mm² flexible / 4-50 mm² semi rigid indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 BMC / V-0 in accordance with UL 94 PD / IP 3 / 20 (built-in) 395 g CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required	Response time	ta	≤ 100 ns
Operating temperature range / Humidity Terminal-Conductor size (double clamps for V-connection on L-terminal) Mounting Case material / Flammability grade Pollution degree / Degree of protection Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Information: by Certification at locations of the special page. Terminal-Conductor size (double clamps for V-connection on L-terminal) 4-35 mm² flexible / 4-50 mm² semi rigid indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 BMC / V-0 in accordance with UL 94 PD / IP 3 / 20 (built-in) 395 g Certifications: width CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Information: Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required	Insulation resistance	Rins	
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Mounting indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 Case material / Flammability grade Pollution degree / Degree of protection Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Infomax. prospective short circuit current at the SPD's point of installation indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715 BMC / V-0 in accordance with UL 94 PD / IP 3 / 20 (built-in) 395 g CR, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Infomax. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required	Operating temperature range / Humidity		
Case material / Flammability grade Pollution degree / Degree of protection Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Information: Max. prospective short circuit current at the SPD's point of installation External backup fuse required BMC / V-0 in accordance with UL 94 3 / 20 (built-in) 395 g CB, STC issued by OVE / KEMA-KEUR CB, STC issued by OVE / KEMA-KEUR 50 kA rms (tested by CTI) 315 A gG	Terminal-Conductor size (double clamps for V-connection on L-terminal)		
Pollution degree / Degree of protection Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation External backup fuse required PD / IP 3 / 20 (built-in) 395 g CB, STC issued by OVE / KEMA-KEUR CB, STC issued by OVE / KEMA-KEUR 50 kA rms (tested by CTI) 315 A gG			indoor, 35 x 7,5 mm top hat DIN rail IEC/EN 60715
Approximate weight Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation External backup fuse required 395 g CB, STC issued by OVE / KEMA-KEUR CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required	Case material / Flammability grade		BMC / V-0 in accordance with UL 94
Dimensions: width Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation External backup fuse required 53 mm (3 modules) CB, STC issued by OVE / KEMA-KEUR Additional Technical Information: for application at locations with a prospective short circuit current interrupt rating Ifi 50 kA rms (tested by CTI) 315 A gG	Pollution degree / Degree of protection	PD / IP	3 / 20 (built-in)
Certifications / Quality Mark Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation External backup fuse required CB, STC issued by OVE / KEMA-KEUR STORMAN (Tested by OVE / KEMA-KEUR	Approximate weight		
Additional Technical Information: for application at locations with a prospective short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation External backup fuse required 50 kA rms (tested by CTI) 315 A gG	Dimensions: width		
short circuit current higher than the follow current interrupt rating Ifi Max. prospective short circuit current at the SPD's point of installation External backup fuse required 50 kA rms (tested by CTI) 315 A gG			CB, STC issued by OVE / KEMA-KEUR
Max. prospective short circuit current at the SPD's point of installation 50 kA rms (tested by CTI) External backup fuse required 315 A gG			
External backup fuse required 315 A gG			
·	Max. prospective short circuit current at the SPD's point of installation		50 kA rms (tested by CTI)
GTIN (EAN) 8054890320580	External backup fuse required		315 A gG
	GTIN (EAN)		8054890320580

^{*} with fuse 125 A gG limp= 10 kA and Imax=40 kA, with fuse 100 A gG limp=9 kA and Imax= 30 kA