





## HSA-385 Module

- Removable modules for surge arresters type T2+T3.
- Ensure the equipotential bonding and reduce switching, induced and residual overvoltage in single-phase and three-phase LV power supply systems.
- Installed at the boundaries of LPZ 1 LPZ 3 into subsidiary switchboards and control panels.
- The products consist of varistors with big discharge ability.

Test class according to EN 61643-11:2012 (IEC 61643-11:2011)T2, T3Maximum continuous operating voltage ACUc385 VMaximum discharge current (8/20)Imax40 kANominal discharge current for class II test (8/20)In15 kAOpen circuit voltage of the combination wave generatorUoc6 kVVoltage protection level at InUp<1.55 kVSpare module for27 186, 27 187, 27 530, 27 535, 27 531, 27 536, 27 532, 27 537, 27 533, 27 538, 27 534, 27 536, 27 532, 27 537, 27 533, 27 538, 27 534, 27 536, 27 532, 27 537, 27 533, 27 538, 27 534, 27 539Designed according to standards27 186, 27 187, 27 530, 27 538, 27 534, 27 539Requirements and test methods for SPDs connected to low-voltage power systemIEC 61643-11:2011Satety of Flarmability of Plastic MaterialsUL 94Portection against lightningIEC 62305:2010Selection and apelication principles for SPDs connected to low-voltage power systemCLC/TS 61643-11:2009Selection and application principles for SPDs connected to low-voltage power systemIEC 62305:2010Selection and application principles for SPDs connected to low-voltage power systemIEC 61643-11:2009Selection and application principles for SPDs connected to low-voltage power systemIEC 61643-11:2011Sate of Flarmability of Plastic MaterialsUL 94Protection against lightningIEC 61643-11:2010Selection and application principles for SPDs connected to low-voltage power systemIEC 61643-11:2010Selection and application principles for SPDs connected to low-voltage power systemIEC 61643-11:2011	Туре		HSA-385 Module
Maximum discharge current (8/20)Imax40 kANominal discharge current for class II test (8/20)I,15 kAOpen circuit voltage of the combination wave generatorU <sub>OC</sub> 6 kVVoltage protection level at I,Up<1.55 kV	Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		T2, T3
Nominal discharge current for class II test (8/20)InInNominal discharge current for class II test (8/20)In15 kAOpen circuit voltage of the combination wave generator $U_{0c}$ 6 kVVoltage protection level at In $U_{p}$ <1.55 kV	Maximum continuous operating voltage AC	U <sub>c</sub>	385 V
Open circuit voltage of the combination wave generatorUoc% MOpen circuit voltage of the combination wave generatorUoc6 kVVoltage protection level at InUp<1.55 kV	Maximum discharge current (8/20)	I <sub>max</sub>	40 kA
Voltage protection level at InVoltage protection level at InVo	Nominal discharge current for class II test (8/20)	I <sub>n</sub>	15 kA
Spare module for27 186, 27 187, 27 530, 27 535, 27 531, 27 536, 27 532, 27 537, 27 533, 27 538, 27 534, 27 539Designed according to standardsURequirements and test methods for SPDs connected to low-voltage power systemsIEC 61643-11:2011Safety of Flammability of Plastic MaterialsUL 94Application standardsUL 94Selection against lightningIEC 62305:2010Selection and erection of electrical equipment – Switchgear and controlgearHD 60364-5-53:2022Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-11:2009Ordering, packaging and additional datamMassmMassmMass (including the packaging)mPackaging dimensions (H x W x D)mPackaging valueVOutsoms tariff no.VEAN code8590681116227	Open circuit voltage of the combination wave generator	U <sub>oc</sub>	6 kV
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Requirements and test methods for SPDs connected to low-voltage power systemsIEC 61643-11:2011Safety of Flammability of Plastic MaterialsUL 94Application standardsUL 94Protection against lightningIEC 62305:2010Selection and erection of electrical equipment – Switchgear and controlgearHD 60364-5-53:2022Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-12:2009Ordering, packaging and additional datamMassMMass (including the packaging)mPackaging dimensions (H x W x D)MPackaging valueVOut of the system of the	Spare module for		536, 27 532, 27 537, 27 533, 27 538, 27 534,
Safety of Flammability of Plastic MaterialsUL 94Application standardsUL 94Protection against lightningIEC 62305:2010Selection and erection of electrical equipment – Switchgear and controlgearHD 60364-5-53:2022Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-12:2009Ordering, packaging and additional datam49 gMassm60 gPackaging dimensions (H x W x D)m60 gPackaging valueV0.19 dm³Customs tariff no.S5363010EAN code8590681116227	Designed according to standards		
Application standardsIEC 62305:2010Protection against lightningIEC 62305:2010Selection and erection of electrical equipment – Switchgear and controlgearHD 60364-5-53:2022Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-12:2009Ordering, packaging and additional datam49 gMassm60 gPackaging dimensions (H x W x D)m26 x 98 x 73 mmPackaging valueV0.19 dm³Customs tariff no.8590681116227	Requirements and test methods for SPDs connected to low-voltage power systems		IEC 61643-11:2011
Protection against lightningIEC 62305:2010Selection and erection of electrical equipment – Switchgear and controlgearHD 60364-5-53:2022Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-12:2009Ordering, packaging and additional datamMassmMass (including the packaging)mPackaging dimensions (H x W x D)mPackaging valueVOutpering, valueVCustoms tariff no.85363010EAN code8590681116227	Safety of Flammability of Plastic Materials		UL 94
Selection and erection of electrical equipment – Switchgear and controlgearHD 60364-5-53:2022Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-12:2009Ordering, packaging and additional datamMassmMass (including the packaging)mPackaging dimensions (H x W x D)aPackaging valueVOutput0.19 dm³Customs tariff no.85363010EAN code8590681116227	Application standards		
Selection and application principles for SPDs connected to low-voltage power systemsCLC/TS 61643-12:2009Ordering, packaging and additional datam49 gMassm49 gMass (including the packaging)m60 gPackaging dimensions (H x W x D)26 x 98 x 73 mmPackaging valueV0.19 dm³Customs tariff no.85363010EAN code8590681116227	Protection against lightning		IEC 62305:2010
Ordering, packaging and additional dataMassm49 gMass (including the packaging)m60 gPackaging dimensions (H x W x D)26 x 98 x 73 mmPackaging valueV0.19 dm³Customs tariff no.85363010EAN code8590681116227	Selection and erection of electrical equipment – Switchgear and controlgear		HD 60364-5-53:2022
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Mass (including the packaging)m60 gPackaging dimensions (H x W x D)26 x 98 x 73 mmPackaging valueV0.19 dm³Customs tariff no.85363010EAN code8590681116227	Ordering, packaging and additional data		
Packaging dimensions (H x W x D) 26 x 98 x 73 mm   Packaging value V 0.19 dm <sup>3</sup> Customs tariff no. 85363010   EAN code 8590681116227	Mass	m	49 g
Packaging valueV0.19 dm³Customs tariff no.85363010EAN code8590681116227	Mass (including the packaging)	m	60 g
Customs tariff no. 85363010   EAN code 8590681116227	Packaging dimensions (H x W x D)		26 x 98 x 73 mm
EAN code 8590681116227	Packaging value	V	0.19 dm <sup>3</sup>
	Customs tariff no.		85363010
Art. number 27 193	EAN code		8590681116227
	Art. number		27 193



**The link in the QR code** leads to the online presentation of the **HSA-385 Module**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com** 





## Internal diagram

