



HES160GC

Moulded Case Circuit Breaker h3+ P160 LSNI 3P3D 160A 70kA CTC

Technical properties

Architecture

Type of order	Toggle
Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3P3D
Fixing mode	fixing plate
Type of case	Fixed built-in

Functions

Complete device with protection unit	Yes
Reversing switch	No
Version as main switch	Yes
Version as emergency stop installation	No
Version as safety switch	No
Version as maintenance-/service switch	Yes
Trip Unit	LSNI
Integrated earth fault protection	No

Controls and indicators

Motor drive integrated	No
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Main electrical features

Rated operational voltage Ue	220 / 690 V
Type of supply voltage	AC
Frequency	50/60 Hz

Voltage

Rated insulation voltage	800 V
Rated impulse withstand voltage	8 kV
With under voltage release	No

Electric current

Rated current	160 A
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2	6 kA
Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2	1.6 kA
Rated short-time withstand current Icw t=0.4S 380-415 V AC according IEC 60947-2	1.6 kA

Rated short-time withstand current I _{cs} t=0.4S 660-690 V AC according IEC 60947-2	1.6 kA
Rating current 10°C according to IEC 60947	160 A
Rating current 15°C according to IEC 60947	160 A
Rating current 20°C according to IEC 60947	160 A
Rating current 25°C according to IEC 60947	160 A
Rating current 30°C according to IEC 60947	160 A
Rating current 35°C according to IEC 60947	160 A
Rating current 40°C according to IEC 60947	160 A
Rating current 45°C according to IEC 60947	160 A
Rating current 50°C according to IEC 60947	160 A
Rating current 55°C according to IEC 60947	160 A
Rating current 60°C according to IEC 60947	159 A
Rating current 65°C according to IEC 60947	145 A
Rating current 70°C according to IEC 60947	135 A
Rated service breaking capacity I _{cs} under 660V AC according IEC 60947-2	6 kA
Breaking capacity on 1 pole for IT 230V NF 60947-2	2.5 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	2.5 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	2.5 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 230V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 240V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 400V AC IEC 60947-2	70 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 415V AC IEC 60947-2	70 kA
Rated service breaking capacity I _{cs} under 110-138V AC according IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 220V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 380V AC IEC 60947-2	70 kA
Rated ultimate short-circuit breaking capacity I _{cu} under 660V AC IEC 60947-2	6 kA
Dimensions	
Depth of installed product	97 mm
Height of installed product	130 mm
Width of installed product	90 mm
Frequency	
Frequency	50 to 60 Hz
Power	
Total power loss under I _N	27 W
Power loss per pole at I _N	9 W
Endurance	
Electric endurance in number of cycles	10000

Subject to technical modifications

Number of mechanical operations	40000
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Cover, door

Interlockable	Yes
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Installation, mounting

Tightening torque	6Nm
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DIN rail mounting with optional adaptor	Yes
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Suitable for front mounting center	No
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Suitable for front mounting	No
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Suitable for ground mounting	Yes
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Connection

Connection cross-sect. flexible conductor	6 / 70mm ²
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Connection cross-sect. rigid cable	6 / 95mm ²
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Connection	Front connection
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Type of connection	with screw
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Protection

Instantaneous protection (II): type	fixed
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Cable

Cable Material	Cu
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Equipment

Number of auxiliary contacts as normally closed contact	0
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Number of auxiliary contacts as normally open contact	0
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Number of auxiliary contacts as change-over contact	0
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Motor drive optional	No
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Can be accessorized	Yes
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Use cases

Category of use	A
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Use

Vibrations and shocks withstand	IEC 68068-2-52 Test FC
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Standards

Standard text	IEC 60947-2
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European directive WEEE	concerned
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Safety

Protection index IP	IP4X
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REACH conform	No
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RoHS conform	Yes
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Halogen free	No
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Use conditions

Degree of pollution according to IEC 60664 / IEC 60947-2	3
Altitude	2000 m
Air humidity protection	95%HR 55°C sev Kn (IEC 68-2-30/52)
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Temperature of calibration	50 °C