



HES041JC

Moulded Case Circuit Breaker h3+ P160 LSI 4P4D N0-50-100% 40A 70kA CTC

Technical properties

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Neutral position left Number of protected poles 4 Number of protected poles 4 Number of poles 4P4D N:0750/100% 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 Lst Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No Main electrical features Rated operational voltage Ue 220 / 690 V Type of supply voltage AC Frequency 50/60 Hz Voltage Rated insulation voltage No Rated impulse withstand voltage No Rated impulse withstand voltage No Rated under voltage release No Retectric current Rated current No Rated dultimate short-circuit breaking capacity Icu under 690 V AC Ecc 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw Te-0-45 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw		
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Number of poles 4 P Type of pole 4P4D N:0/50/100% Type of case Fixed built-in Functions Complete device with protection unit Yes Reversing switch No Version as main switch Yes Version as main switch No Version as asfety switch No Version as asfety switch No Version as maintenance-/service switch Yes Trip Unit Lsi Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No 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 Voltage Rated insulation voltage 800 V With under voltage release No Electric current Rated current 40 A Rated dultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Rated short-time withstand current Icw E-0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw E-1.6 Scape AC Rated short-time withstand current Icw E-1.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw E-1.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw E-1.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw E-1.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw E-1.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw E-1.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw	Neutral position	left
Type of pole 4P4D N:0/50/100% 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 List Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No 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 With under voltage release No Electric current Rated current 40 A Rated dimpulse withstand voltage No Rated dimpulse withstand voltage AC Rated short-time withstand current Icw Lack AC Rated short-time withstand current Icw Lack AC Rated short-time withstand current Icw Lack AC Rated short-time withstand current Icw	Number of protected poles	4
Type of case Fixed built-in Functions Complete device with protection unit Yes Reversing switch No Version as main switch Yes Version as mergency stop installation No Version as maintenance-/service switch Yes Trip Unit LSI Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No Main electrical features Rated operational voltage Ue 220 / 690 V Type of supply voltage AC Frequency 50/60 Hz Voltage Rated insulation voltage Rated short-time withstand current Icw Electric current Rated dort-time withstand current Icw E-0.45 220-240 V AC according IEC 60947-2 6 KA Rated short-time withstand current Icw E-0.45 220-240 V AC according IEC 60947-2 1.6 KA Rated short-time withstand current Icw E-0.45 220-240 V AC according IEC 60947-2 1.6 KA Rated short-time withstand current Icw	Number of poles	4 P
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Version as emergency stop installation No Version as safety switch No Version as maintenance-/service switch Yes Trip Unit LSI Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No 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 40 A Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Reversing switch	No
Version as safety switch Version as maintenance-/service switch Yes Trip Unit LSI Integrated earth fault protection Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No Main electrical features Rated operational voltage Ue Type of supply voltage Frequency Sol/60 Hz Voltage Rated insulation voltage release No Electric current Rated current Rated current Rated short-time withstand current lcw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current lcw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current lcw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current lcw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current lcw	Version as main switch	Yes
Version as maintenance-/service switch Trip Unit LSI Integrated earth fault protection Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No Main electrical features Rated operational voltage Ue Type of supply voltage Frequency Sol/60 Hz Voltage Rated insulation voltage Rated insulation voltage Rated impulse withstand voltage Belectric current Rated current Rated current Rated current Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw	Version as emergency stop installation	No
Trip Unit LSI Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No 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 800 V With under voltage release No Electric current Rated current 40 A Rated current 40 A 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 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Version as safety switch	No
Integrated earth fault protection No Concurrently switching N-neutral Yes Controls and indicators Motor drive integrated No 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 80 V With under voltage release No Electric current Rated current 40 A Rated ultimate short-circuit breaking capacity Icu under 690 V 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 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Version as maintenance-/service switch	Yes
Controls and indicators Motor drive integrated No 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 40 A Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 6 kA Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Trip Unit	LSI
Controls and indicators Motor drive integrated No 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 40 A Rated ultimate short-circuit breaking capacity Icu under 690 V AC IEC 60947-2 6 kA Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Integrated earth fault protection	No
Motor drive integrated Main electrical features Rated operational voltage Ue Type of supply voltage Frequency Sol/60 Hz Voltage Rated insulation voltage Rated impulse withstand voltage 800 V With under voltage release No Electric current Rated current Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Concurrently switching N-neutral	Yes
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 40 A Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 6 kA Rated short-time withstand current Icw t=0.45 220-240 V AC according IEC 60947-2 1.6 kA Rated short-time withstand current Icw	Controls and indicators	
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Type of supply voltage Frequency Voltage Rated insulation voltage Rated impulse withstand voltage With under voltage release Rated current Rated current Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw t=0.4S 220-240 V AC according IEC 60947-2 1.6 kA	Main electrical features	
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 40 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	Rated operational voltage Ue	220 / 690 V
Voltage Rated insulation voltage 800 V Rated impulse withstand voltage 8 kV With under voltage release No Electric current Rated current 40 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	Type of supply voltage	AC
Rated insulation voltage 800 V Rated impulse withstand voltage 8 kV With under voltage release No Electric current Rated current 40 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	Frequency	50/60 Hz
Rated impulse withstand voltage 8 kV With under voltage release No Electric current Rated current 40 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	Voltage	
With under voltage release Rated current Rated current 40 A Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 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	Rated insulation voltage	800 V
Electric current Rated current 40 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	Rated impulse withstand voltage	8 kV
Rated current 40 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	With under voltage release	No
Rated ultimate short-circuit breaking capacity Icu under 690V AC IEC 60947-2 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	Electric current	
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t=0.4S 220-240 V AC according IEC 60947-2 Rated short-time withstand current Icw		6 kA
		1.6 kA
		1.6 kA

Rated short-time withstand current Icw t=0.4S 660-690 V AC according IEC 60947-2	1.6 kA
Rating current 10°C according to IEC 60947	40 A
Rating current 15°C according to IEC 60947	40 A
Rating current 20°C according to IEC 60947	40 A
Rating current 25°C according to IEC 60947	40 A
Rating current 30°C according to IEC 60947	40 A
Rating current 35°C according to IEC 60947	40 A
Rating current 40°C according to IEC 60947	40 A
Rating current 45°C according to IEC 60947	40 A
Rating current 50°C according to IEC 60947	40 A
Rating current 55°C according to IEC 60947	40 A
Rating current 60°C according to IEC 60947	40 A
Rating current 65°C according to IEC 60947	40 A
Rating current 70°C according to IEC 60947	40 A
Rated service breaking capacity Ics 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 Icu under 230V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	70 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	70 kA
Rated service breaking capacity Ics under 110-138V AC according IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	85 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	70 kA
Rated ultimate short-circuit breaking capacity Icu 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	120 mm
Frequency	
Frequency	50 to 60 Hz
Power	
Total power loss under IN	1.68 W
Power loss per pole at In	0.56 W
Endurance	
Electric endurance in number of cycles	10000

Number of mechanical operations	4000
Cover, door	
Interlockable	Ye
Installation, mounting	
Tightening torque	6Nr
DIN rail mounting with optional adaptator	Ye
Suitable for front mounting center	N
Suitable for front mounting	N
Suitable for ground mounting	Ye
Connection	
Connection cross-sect. flexible conductor	6 / 70mm
Connection cross-sect. rigid cable	6 / 95mm
Connection	Front connectio
Type of connection	with scre
Protection	
Instantaneous protection (Ii): type	adjustab
Cable	
Cable Material	C
Equipment	
Number of auxiliary contacts as normally closed contact	
Number of auxiliary contacts as normally open contact	
Number of auxiliary contacts as change- over contact	
Motor drive optional	N
Can be accessorized	Ye
Use cases	
Category of use	
Use	
Vibrations and shocks withstand	IEC 68068-2-52 Test F
Standards	
Standard text	IEC 60947-
Safety	
REACH conform	N
RoHS conform	Ye
Halogen free	N
Use conditions	
Degree of pollution according to IEC 60664 / IEC 60947-2	

Air humidity protection

95%HR 55°C sev Kn (IEC 68-2-30/52)

temperatur

Temperature of calibration

50 °C