

DATA SHEET

miniature circuit-breakers DLS 6i K63-1

for industrial facilities, K characteristics, 10 kA
Article number 09916569





Function

The task of miniature circuit breakers is to automatically disconnect circuits in order to protect lines and connected devices. After disconnection, they can be manually reactivated without the fuse sets having to be replaced, for example. Each of our miniature circuit breakers is equipped with a trip-free mechanism, which guarantees safe deactivation even if, for example, a switching knob is mechanically blocked. A key requirement in DIN VDE 0100 is to protect cables, lines and installation devices from overload and shortcircuit. This can be achieved using miniature circuit-breaker (MCBs). In industrial installations and also in commercial buildings, they often take on additional protection of equipment and devices where there are usually stricter requirements than when used in residential buildings. Miniature circuit-breakers utilise both the magnetic and heat effect of the electrical current. If the current jumps to a value that is too high when a short-circuit occurs, the MCB interrupts the circuit using the magnetic field of an energised coil. The heat that develops when there is continuous overload causes the bimetal to warp, which trips the breaker. The DLS 6 family of miniature circuit-breakers, characterised by a large selection of different types for broad application fields, are available for residential and purpose-built facilities, as well as for industrial applications. The compact design provides lots of space for wiring and large clamping area, as well as the option of using conventional wiring rails for easy processing. The variants also have a large, folding label window and a clearly labelled display for the operating status. A number of additional devices such as under-voltage and operating current trip, and auxiliary/fault sensor switches, render possible general-purpose use of the miniature circuit-breakers. Its high rated switching capacity of 10 kA means the DLS 6i variant is particularly suited to usage in industrial systems for example. Also, the large selection of rated currents and tripping characteristics enable the miniature circuit-breaker to be used in a diverse range of applications. Switches with characteristic K are optimised for fuseprotecting power circuits (motor and transformer load circuits) with high switch-on currents.

Features

rated switching capacity 10 kA, screw terminals with strain-relief clamps with wide terminal cross-section range for rail and line wiring on both connection sides, special quick fastening for removal of multiple miniature circuit-breakers from the bottom or top interconnection, large, folding label window for a secure hold and protection of the label, use of conventional wiring rails, ON/OFF switch position indicator on the switch toggle, accessories retro-fittable on the right, labelling software free of charge

Mounting

quick fastening to mounting rail, any installation position

Applications

suitable for use in power supplies for industrial facilities and purpose-built buildings or buildings for commercial use

Accessories

terminal caps KA, software DBS, restart locks DEASS, auxiliary switches DHi, trip-indicating auxiliary contact DHi-S, operating current trip DASA, documentation

Technical Data

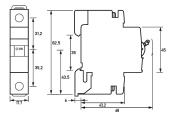
Technical Data	DLS 6i K6 ₃ -1
Series	DLS 6i
Number of poles	1
Tripping characteristic	К
Supply side	left or right
Adjustment range of overload tripping	1.05 1.2
Adjustment range of short-circuit tripping	8 12

Tripping factor over frequency basing factor factor retiping electromagnetic factor retaining factor factor retaining factor retaining factor over factor retaining factor retaining factor retaining factor factor retaining factor retaining factor factor retaining factor factor retaining factor factor retaining factor factor factor retaining factor	Technical Data	DLS 6i K63-1
Test current factor tripping electromagnetic Test current multiplier, trip, thermal 1.2 thermal 1.2 test current multiplier, trip, thermal 8 electromagnetic Test current factor retaining electromagnetic 1.05 test current factor retaining thermal 1.06 test current factor retaining thermal 1.08 test current factor retaining thermal 1.09 test current factor retaining thermal 1.09 test current factor retaining thermal 1.00 test current factor retaining thermal 1.00 test current factor retaining thermal 1.00 test current factor retaining thermal factor f	Tripping factor over frequency	
electromagnetic Test current multiplier, trip, thermal Test current factor retaining electromagnetic Test current factor retaining Electromagnetic Test current factor retaining Test curr	***	
thermal Test current factor retaining		12
electromagnetic Test current factor retaining thermal Reference temperature thermal release Solation class Cat 250 V AC, B at 450 V AC Number 1 1 Specification Ioad circuit Ioad circuit Ioad circuit Specification Ioad circuit Ioad circu	Test current multiplier, trip, thermal	1.2
thermal Reference temperature thermal release Isolation class Cat 250 V AC; B at 400 V AC Number 1 Specification Ioad disconnect contact Rated voltage (AC) Rated voltage (AC) Rated voltage (DC) Rated solvation (CC) Rated solvation (CC) Rated solvation (CC) Rated current (AC) Rated solvation voltage 2 kV Rated insulation voltage 2 kV Rated insulation voltage 3 kV Rated frequency 50 Hz (16.67 Hz 60 Hz) Current heat loss per current path Short-circuit backup-fuse SCPD 125 A Back-up fuse type 9 gl., gG Back-up fuse (textual) Safety fuse a per DIN EN 0656 Overvoltage class III Serve (textual) Solvation (Connection CL Maximum 2 (conductors of same type and cross-section) number of conductors per terminal Cross section stranded 1 wire: 0.5 mm² 25 mm² Thickness busbar cable lug (combined conductors) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1 wire: 1.5 mm² 25 mm² Thickness busbar and Connection (Connection Cannection Cann		8
Isolation class Cat 250 V AC, B at 400 V AC Number I 1 Indication Ioad circuit	Test current factor retaining thermal	1.05
Number 1 Specification Goad disconnect contact		20 °C
Ioad circuit Specification Ioad disconnect contact	Isolation class	C at 250 V AC; B at 400 V AC
Specification load disconnect contact Rated voltage (AC) 230 V, 400 V Rated voltage (DC) 60 V Rated voltage (DC) 63 A Rated short-circuit current 10 to kA Rated insulation voltage 1 kV Rated insulation voltage 2 kV Rated insulation voltage 4 kV Rated insulation voltage 7 W Rated insulation voltage 9 Text (16.67 Hz 60 Hz) Current heat loss per current 7 W Path 10 Short-circuit backup-fuse SCPD 1 15 A Back-up fuse (textual) 5 Safety fuse as per DIN EN 0636 Overvoltage class III Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum 10 Cross section flexible with ferrule 1 -wire: 1,5 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Cross section stranded 1 -wire: 1,5 mm² 25 mm² Thickness busbar 1 max 2,5 Mm Thickness busbar 2 max 3 mm Thickness busbar 2 max 3 mm Thickness busbar 3 max 3 mm Thickness busbar 4 max 3 mm Thickness busbar 5 max 3 mm Thickness busbar 6 max 3 mm Thickness busbar 1 pusbar 6 for conductors of same type and cross-section) screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof 2 max 2,5 Mm Thickness busbar 5 max 3 mm Thickness busbar 6 max 3 mm Thickness busbar 6 max 3 mm Thickness busbar 7 max 2 mm² 25 mm² 2	Number	1
Rated voltage (AC) Rated voltage (DC) Rated voltage (DC) Rated current (AC) Rated short-circuit current 10 kA Rated insulation voltage Rated insulation voltage Rated final pulse withstand voltage Rated frequency 90 Hz (16.67 Hz 60 Hz) Current heat loss per current path Short-circuit backup-fuse SCPD 125 A Back-up fuse type Rated frequency 91 Ly gG Rack-up fuse type Rack-up fuse type Rack-up fuse (textual) Safety fuse as per DIN EN 0636 Covervoltage class III Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1-wire: 0.5 mm² 25 mm² Cross section solid 1-wire: 0.5 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Thickness busbar max. 3 mm Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined onductors, max) Cross section flexible with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1-wire: 1.5 mm² 25 mm² Thickness busbar Thickness busbar DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1-wire: 0.5 mm² 35 mm² Cross section flexible with ferrule 0.5 mm² 35 mm² Cross section flexible vith ferrule 0.5 mm² 35 mm² Cross section flexible vith ferrule 0.5 mm² 35 mm² Cross section flexible vith ferrule 0.5 mm² 35 mm² Cross section flexible vith ferrule		load circuit
Rated voltage (DC) Rated current (AC) Rated short-circuit current Rated short-circuit current Rated short-circuit current Rated insulation voltage Rated impulse withstand voltage Rated impulse withstand voltage Rated frequency So Hz (1.6.67 Hz 60 Hz) Current heat loss per current path Short-circuit backup-fuse SCPD Back-up fuse (textual) Safety fuse as per DIN EN o636 Overvoltage class III Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE o660-514, finger and back-of-hand proof Connecting capacity flexible Cross section Sulad Cross section flousbar / Bushar (and in the substance) Thickness bushar Thickness bushar Thickness bushar able lug (combined conductors, max) Cross section flousbar / bushar (for conductors per terminal) Cross section flousbar / bushar (for conductors, max) Cross	Specification	load disconnect contact
Rated current (AC) Rated short-circuit current 10 kA Rated insulation voltage Rated frequency So Hz (16.67 Hz 60 Hz) Current heat loss per current path Short-circuit backup-fuse SCPD Rack-up fuse type Rack-up fuse type Rack-up fuse (textual) Safety fuse as per DIN EN 0636 Overvoltage class III Protection against direct contact DGUV Vz, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Cross section solid 2 -wire: 1.5 mm² 25 mm² Thickness busbar able lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV Vz, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1-wire: 1.5 mm² 25 mm² Thickness busbar T	Rated voltage (AC)	230 V, 400 V
Rated short-circuit current Rated insulation voltage Rated insulation voltage Rated insulation voltage Rated fingulse withstand voltage Rated frequency So Hz (16.67 Hz 60 Hz) Current heat loss per current path Short-circuit backup-fuse SCPD 125 A Back-up fuse type Rated frequency Back-up fuse type Rated frequency Rated frequency Safety fuse as per DIN EN 636 Overvoltage class III Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible Cross section flexible with ferrule Ross section stranded 1-wire: 0.5 mm² 25 mm² Cross section stranded 1-wire: 1 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section flexible with ferrule Ross section flexible with ferrule Ross section flexible with ferrule Ross section flexible with force of conductors, max) Cross section flexible with ferrule Ross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque Ross section flexible with ferrule Ross section flexible Ross section flexible Ross section flexible Ross section flexible Ross section solid Ross section flexible Ross section flexible with ferrule	Rated voltage (DC)	60 V
Rated insulation voltage 2 kV Rated impulse withstand voltage 4 kV Rated frequency 50 Hz (16.67 Hz 60 Hz) Current heat loss per current 7 W path Short-circuit backup-fuse SCPD 125 A Back-up fuse (type 9 Gl, gG Back-up fuse (type 1 Gl) Safety fuse as per DINEN 0636 Overvoltage class III Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1-wire: 1.5 mm² 25 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Thickness busbar max. 3 mm Thickness busbar max. 3 mm Thickness busbar busbar 2 mm Cross section flexible of the substance	Rated current (AC)	6 ₃ A
Rated impulse withstand voltage Rated frequency So Hz (16.67 Hz 60 Hz) Current heat loss per current path Short-circuit backup-fuse SCPD 125 A Back-up fuse type Subject (18.67 Hz 60 Hz) Sack-up fuse type Subject (18.67 Hz 60 Hz) Subject (18	Rated short-circuit current	10 kA
Rated frequency Current heat loss per current path short-circuit backup-fuse SCPD 125 A Back-up fuse type Back-up fuse (textual) Overvoltage class III Stort-circuit backup-fuse (textual) Overvoltage class III Protection against direct contact Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Thickness busbar cable lug (combined conductors, max) Finds the substance of the substance of the conductors, max) Screw terminals with strain-relief clamp top (load circuit) DGUV V2, VDE o660-514, finger and back-of-hand proof Connection C1 Maximum 12 (conductors of same type and cross-section) 1-wire: 0.5 mm² 25 mm² Cross section solid 1-wire: 1.5 mm² 25 mm² Thickness busbar display a max. 2.5 Nm Thickness busbar and a max. 3 mm Thickness busbar and a max. 3 mm Thickness busbar a max. 3 mm Thickness busbar a pam² Thickness busbar and a max a mm Thickness for a max a max a max a mm Thickness for a max a max a max a mm Thickness for a max a max a max a max a mm Thickness for a max a m	Rated insulation voltage	2 kV
Current heat loss per current path path Short-circuit backup-fuse SCPD Back-up fuse type Back-up fuse (textual) Overvoltage class III Safety fuse as per DIN EN 0636 Overvoltage class III Sarew terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum 2 (conductors of same type and cross-section) number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 16 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Tightening torque Thickness busbar Thickness busbar Thickness busbar and Thickness busbar busbar Thickness busbar and Thickness busbar busbar Thickness busbar busbar Thickness busbar and Thickness fund busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting capacity flexible 1-wire: 1 mm² 35 mm² connecting capacity flexible 1-wire: 0.5 mm² 35 mm² 2 (conductors of same type and cross-section) number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Consection flexible with ferrule	Rated impulse withstand voltage	4 kV
Short-circuit backup-fuse SCPD Back-up fuse type Back-up fuse (textual) Overvoltage class III Safety fuse as per DIN EN o636 Overvoltage class III Protection against direct contact DGUV V2, VDE o660-514, finger and back-of-hand proof Connection C1 Maximum author of conductors per terminal Cross section solid 1-wire: 0.5 mm² 16 mm² Cross section flexible with ferrule Cross section standed 1-wire: 1,5 mm² 25 mm² Tightening torque Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE o660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE o660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal connection C3 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Cross section solid 1-wire: 0.5 mm² 35 mm² Cross section flexible with ferrule O.5 mm² 35 mm² Cross section flexible with ferrule	Rated frequency	50 Hz (16.67 Hz 60 Hz)
Back-up fuse type Back-up fuse (textual) Safety fuse as per DIN EN 0636 Overvoltage class III Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum 12 (conductors of same type and cross-section) 1 -wire: 0.5 mm² 25 mm² Cross section solid 1 -wire: 0.5 mm² 16 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Tightening torque Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Consection Sdame type and cross-section) 1 -wire: 0.5 mm² 35 mm² 2 (conductors of same type and cross-section) 1 -wire: 0.5 mm² 35 mm² 2 (conductors of same type and cross-section)		7 W
Back-up fuse (textual) Overvoltage class III Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar forck combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connecting C2 Maximum 1 conductors of same type and cross-section) 1 connecting capacity flexible 1 connecting capacity flexible on the maximum capacity flexible 1 connecting capacity flexible 1 connecting capacity flexible on the maximum capacity flexible 1 connecting capacity flexible	Short-circuit backup-fuse SCPD	125 A
Overvoltage class III	Back-up fuse type	gL, gG
Screw terminals with strain-relief clamp top (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum 12 (conductors of same type and cross-section) number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Connecting capacity flexible 1-wire: 1 mm² 16 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque max. 2.5 Nm Thickness busbar Thickness busbar and	Back-up fuse (textual)	Safety fuse as per DIN EN 0636
Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Cross section flexible with ferrule Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 0.5 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 25 mm²	Overvoltage class	
Connection C1 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Connecting capacity flexible 1-wire: 1 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connection Same type and cross-section) 1-wire: 0.5 mm² 35 mm² 1-wire: 0.5 mm² 35 mm² Connection Same type and cross-section) 1-wire: 0.5 mm² 35 mm² Connection Section solid 1-wire: 0.5 mm² 35 mm² Connection Capacity flexible 1-wire: 1 mm² 25 mm² Coss section flexible with ferrule		<u> </u>
number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 25 mm² Connecting capacity flexible 1-wire: 1 mm² 16 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque max. 2.5 Nm Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm²		-
Connecting capacity flexible 1-wire: 1 mm² 16 mm² Cross section flexible with ferrule 0.5 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque max. 2.5 Nm Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule		2 (conductors of same type and cross-section)
Cross section flexible with ferrule O.5 mm² 16 mm² Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque max. 2.5 Nm Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm²	Cross section solid	1-wire: 0.5 mm ² 25 mm ²
Cross section stranded 1-wire: 1.5 mm² 25 mm² Tightening torque max. 2.5 Nm Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule	Connecting capacity flexible	1-wire: 1 mm ² 16 mm ²
Tightening torque Thickness busbar Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE o660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule	Cross section flexible with ferrule	0.5 mm ² 16 mm ²
Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule	Cross section stranded	1-wire: 1.5 mm ² 25 mm ²
Thickness busbar cable lug (combined conductors, max) Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule	Tightening torque	max. 2.5 Nm
Cross section (busbar / busbar fork combined, max) Screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof Connection C2 Maximum number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule	Thickness busbar	max. 3 mm
fork combined, max) screw terminals with strain-relief clamp bottom (load circuit) Protection against direct contact DGUV V2, VDE o660-514, finger and back-of-hand proof 2 (conductors of same type and cross-section) number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule		2 mm
Protection against direct contact DGUV V2, VDE 0660-514, finger and back-of-hand proof 2 (conductors of same type and cross-section) number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² 0.5 mm² 16 mm²	Cross section (busbar / busbar fork combined, max)	25 mm²
Connection C2 Maximum 1 (conductors of same type and cross-section) 2 (conductors of same type and cross-section) 1 - wire: 0.5 mm² 35 mm² 1 - wire: 1 mm² 25 mm² 1 - wire: 1 mm² 25 mm² 1 - wire: 1 mm² 16 mm²		screw terminals with strain-relief clamp bottom (load circuit)
number of conductors per terminal Cross section solid 1-wire: 0.5 mm² 35 mm² Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm²	_	
Connecting capacity flexible 1-wire: 1 mm² 25 mm² Cross section flexible with ferrule 0.5 mm² 16 mm²	number of conductors per terminal	2 (conductors of same type and cross-section)
Cross section flexible with ferrule 0.5 mm² 16 mm²	Cross section solid	1-wire: 0.5 mm ² 35 mm ²
Cross section stranded 1-wire: 1.5 mm ² 35 mm ²		
	Cross section stranded	1-wire: 1.5 mm ² 35 mm ²

Technical Data	DLS 6i K63-1
Tightening torque	max. 2.5 Nm
Thickness busbar cable lug (combined conductors, max)	2 mm
Cross section (busbar / busbar fork combined, max)	35 mm²
Thickness busbar	max. 3 mm
	General data
Operating position	optional
Mechanical endurance	min. 20000 switching cycles
Storage temperature	-40 °C 70 °C
Ambient temperature	-25 °C 55 °C
Climate resistance	damp/heat: constant as per DIN EN 60068-2-78, cyclical as per DIN EN 60068-2-30
Shock resistance	25 g / 11 ms Duration
Vibration resistance	> 15 g acc. to DIN EN 60068-2-59 during a load with I1
Housing type	distribution board housing
Installation type	Mounting rail (35 mm)
Housing material	thermoplastic
Protection class	IP20
sealable	true
Width	17.7 mm
Height	82.5 mm
Depth	74 mm
Installation depth	68 mm
Module widths	1
Weight	0.135 kg
Design requirements/Standards	IEC 60947-2, DIN EN 60947-2, VDE 0660-101
Power limitation category	3
Degree of pollution	2

Dimensions

Dimensional drawing Group view

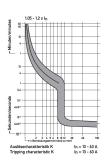


Wiring example



Wiring diagram

Diagrams



Characteristic Char. K