



General Data

Type Reference:	DS...
Description:	Modular contact block (positive opening contact), PUSH-IN connection
Approvals:	CCC, cCSAus, CE, GOST-R, KEMA KEUR, TÜV_SÜD, CE, UkrSepro
Protection class:	II (protective insulation)
Operation travel:	5 mm
Connection type:	push-in connection/0.75 ... 2.5 mm ²
Contact material:	AgNi
Max. storage temperature:	-50°C ... 85°C
Max. operating temperature:	-25°C ... 55°C, with/without illumination
Mechanical life:	50000
Electrical life (rated load):	50000 at rated load
Contact resistance NO:	< 20 mOhm (new state)
Contact resistance NC:	< 20 mOhm (new state)
Min. current:	5 mA (under laboratory conditions)
Min. voltage:	24 V
Bouncing time NO:	< 10 ms
Bouncing time NC:	< 10 ms
Positive opening contact:	acc. to EN60947-5-1, appendix. K

Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

	alternate current	direct current
Utilisation category:	AC15 A600	DC13 Q300
Rated insulation voltage Ui:	600 V	400V
Rated operating voltage Ue:	240V / 380V	250V / 125V / 60V / 24V
Rated operating current Ie:	3A / 1.9A	0.27A / 0.55A / 1A / 2A
Breaking capacity:	10Ie	1.1Ie
Continuous thermal current:	16 A	

Electrical data acc. to IEC/EN 61058-1 (VDE 0630 Sect. 1)

Rated voltage Ue:	250 V~ / 400 V~
Rated current Ie:	16(10) A / 10(5) A

Technical Data - Lamp

Lamp socket:	BA9s
Max. lamp voltage:	250V
Max. lamp output:	2 W
Definition:	X1...anode, X2...cathode

Electrical Features

Switching voltage:	20mV ... 42V AC/DC
Switching current:	1mA ... 250mA
Contact resistance (new state):	< 50 mOhm

Note

NC=Normally Closed; NO=Normally Open

Mounting Instructions

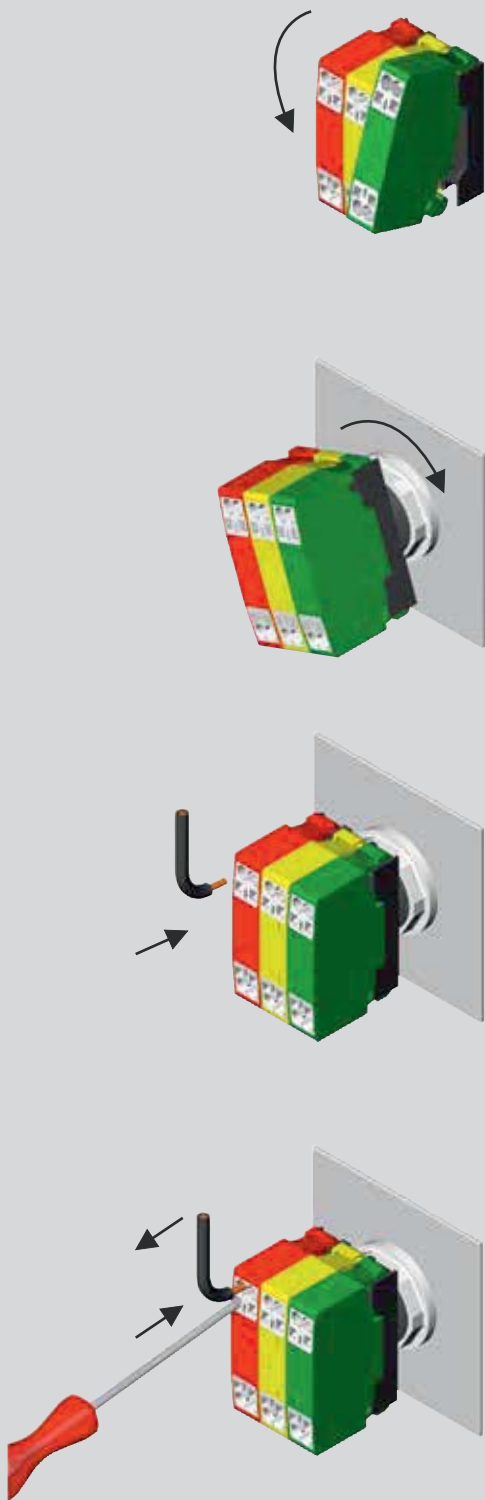


Illustration	Description	Type										
<p>15mm</p> <p>0 1 2 3 4 5 3/4</p> <p>.3 — 1 — 4</p>	<p>Modular Contact Block , momentary 1NO push-in connection/0.75 ... 2.5 mm²</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DSTI										
<p>15mm</p> <p>0 1 2 3 4 5 1/2</p> <p>.1 — 1 — 2</p>	<p>Modular Contact Block , momentary 1NC push-in connection/0.75 ... 2.5 mm²</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DSTO										
<p>15mm</p> <p>X1 — ⊗ — X2</p>	<p>Lamp Module push-in connection/0.75 ... 2.5 mm² max. 250V 2W lamp socket BA9S</p> <p>suitable actuators/pilot light heads</p> <p>colour yellow</p>	DSL9										
<p>4mm</p> <p>-4 -3 -2 -1 0 1 2 3 4 5 .1/2</p> <p>⊙ — .1 — .2</p>	<p>Self-monitoring Emergency Contact Block, momentary* 1NC (+ 1NO) push-in connection/0.75 ... 2.5 mm² *) 1 NC, 1NO and 1 safety contact consisting of 1 emergency NC connected in series to 1 NO which is always closed during operation and disconnects automatically on separation of the actuator from the modular contact.</p> <p>contact material AgNi</p>	DMSTOSF										
	<p>Module Holder for 3 modules with bayonet, to combine the modular contact blocks with the actuators</p>	DMR										
	<p>Ultra-bright LED BA9s with integrated bridge rectifier for 24V AC/DC, 15mA</p> <p>colour</p> <table> <tr><td>blue</td><td>LD9-24UB</td></tr> <tr><td>green</td><td>LD9-24UG</td></tr> <tr><td>red</td><td>LD9-24UR</td></tr> <tr><td>white</td><td>LD9-24UW</td></tr> <tr><td>yellow</td><td>LD9-24UY</td></tr> </table>	blue	LD9-24UB	green	LD9-24UG	red	LD9-24UR	white	LD9-24UW	yellow	LD9-24UY	
blue	LD9-24UB											
green	LD9-24UG											
red	LD9-24UR											
white	LD9-24UW											
yellow	LD9-24UY											

Accessories for Contact blocks

push-in connection/0.75 ... 2.5 mm²



Illustration

Description

Type



Mega-bright LED, BA9s

with integrated bridge rectifier for 24V .. 28V AC/DC, 15.5mA

colour	blue	LD9-24MB
	green	LD9-24MG
	red	LD9-24MR
	white	LD9-24MW
	yellow	LD9-24MY



Ultra-bright LED, BA9s

with integrated single-wave rectifier for 230V AC, 3mA

colour	blue	LD9-230UB
	green	LD9-230UG
	red	LD9-230UR
	white	LD9-230UW
	yellow	LD9-230UY



Flashing LED, BA9s

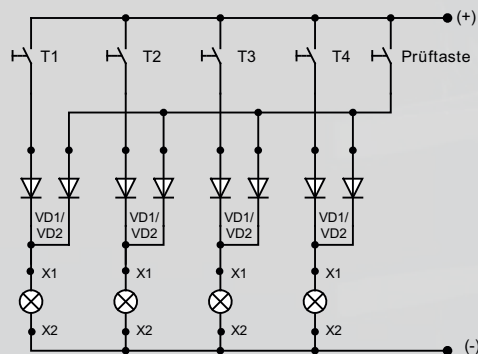
for 24V

colour	green	LB9-24G
	red	LB9-24R
	yellow	LB9-24Y



Incandescent Lamp BA9s

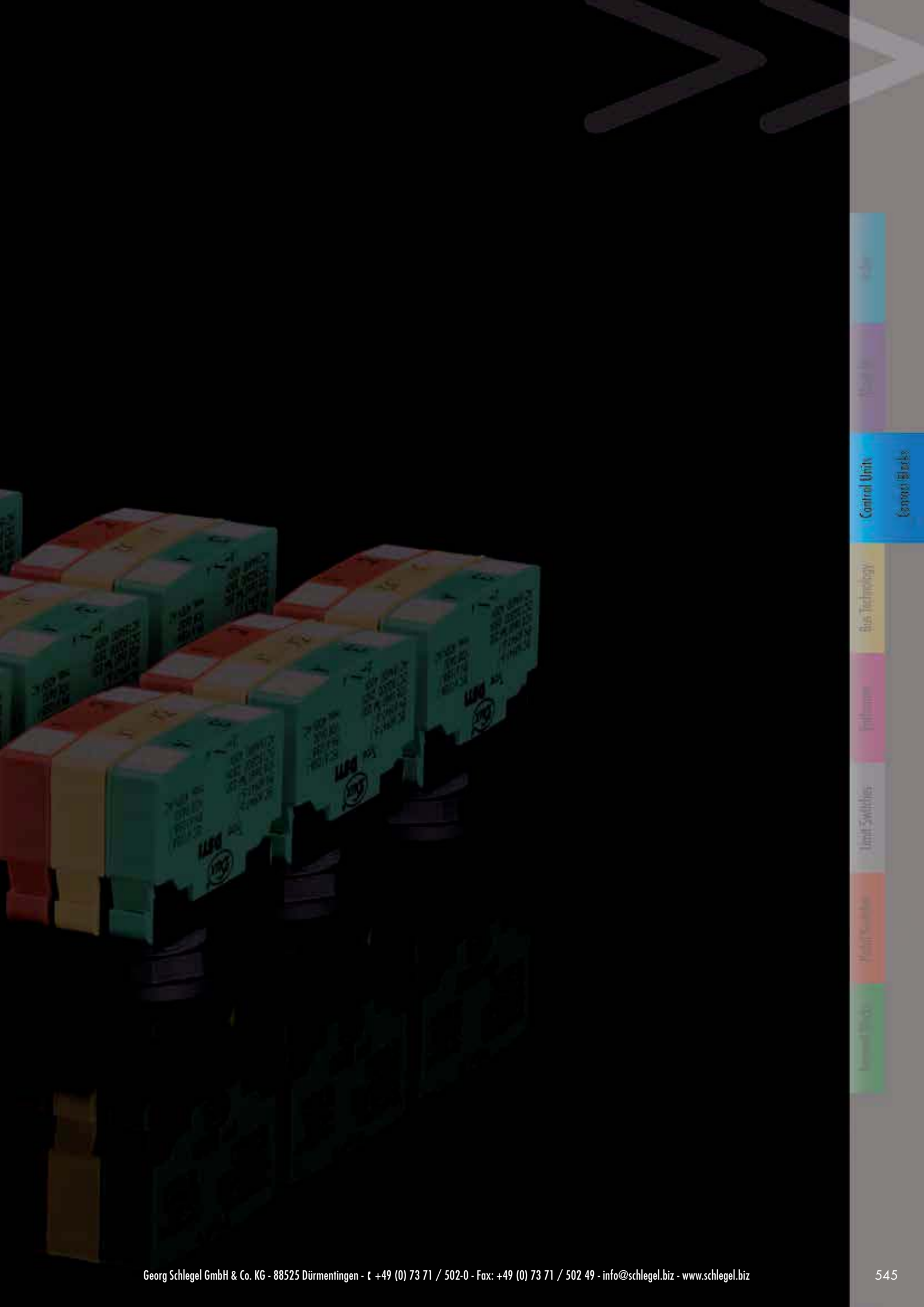
Technical Data	12V / 2,0W (166mA)	FZR9-12
	24V / 2,0W (80mA)	FZR9-24
	30V / 2,0W (66mA)	FZR9-30
	36V / 2,0W (55mA)	FZR9-36
	48V / 2,0W (40mA)	FZR9-48
	60V / 1,2W (20mA)	FZR9-60-1
	110 ... 130V / 2,6W (20mA)	FZR9-130



DC Lamp Testing Unit

entirely sealed, with two screw connections for 2.5 mm², with two integrated diodes 400 V/1A isolating the lamp line from the test line. For DC only.

VD2



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Manual

Control Units
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Terminal Blocks



General Data

Type Reference:	DT...
Description:	Modular contact block, with Cage-Clamp technology
Approvals:	CCC, cCSAus, ENEC10, VDE, CE, GL, GOST-R, KEMA KEUR, UkrSepro
Protection class:	II (protective insulation)
Operation travel:	6 mm
Connection type:	Cage-Clamp 0.08-2.5 mm ²
Contact material:	AgNi
Max. storage temperature:	-40°C ... 70°C
Max. operating temperature:	-25°C ... 55°C, with/without illumination
Mechanical life:	1m operations
Electrical life (rated load):	50000
Contact resistance NO:	< 20 mOhm (new state)
Contact resistance NC:	< 20 mOhm (new state)
Min. current:	1 mA (under laboratory conditions)
Min. voltage:	5 V
Bouncing time NO:	< 10ms
Bouncing time NC:	< 10ms
Positive opening contact:	acc. to EN60947-5-1, appendix. K

Electrical data acc. to IEC/EN 60947-5-1 (VDE 0660 Sect. 200)

	alternate current	direct current
Utilisation category:	AC15 A600	DC13 Q300
Rated insulation voltage Ui:	600 V	400V
Rated operating voltage Ue:	240V / 380V	250V / 125V / 60V / 24V
Rated operating current Ie:	3A / 1.9A	0.27A / 0.55A / 1A / 2A
Breaking capacity:	10Ie	1.1Ie
Continuous thermal current:	16 A	16 A

Electrical data acc. to IEC/EN 61058-1 (VDE 0630 Sect. 1)

Rated voltage Ue:	250 V~ / 400 V~
Rated current Ie:	16(10) A / 10(5) A

Technical Data - Lamp

Lamp socket:	BA9s
Max. lamp voltage:	250V
Max. lamp output:	2 W
Definition:	X1...anode, X2...cathode

Electrical Features

Switching voltage:	20mV ... 42V AC/DC
Switching current:	1mA ... 250mA
Contact resistance (new state):	< 50 mOhm

Environmental / Climatic Tests

Vibration resistance:	50m/s ² at 5-150Hz acc. to DIN IEC 68 2-6
Shock resistance:	30m/s ² at 50ms acc. to DIN IEC 68 2-27
Constant climatic resistance:	IEC 600-68-2-3 and 2-30

Mounting Instructions

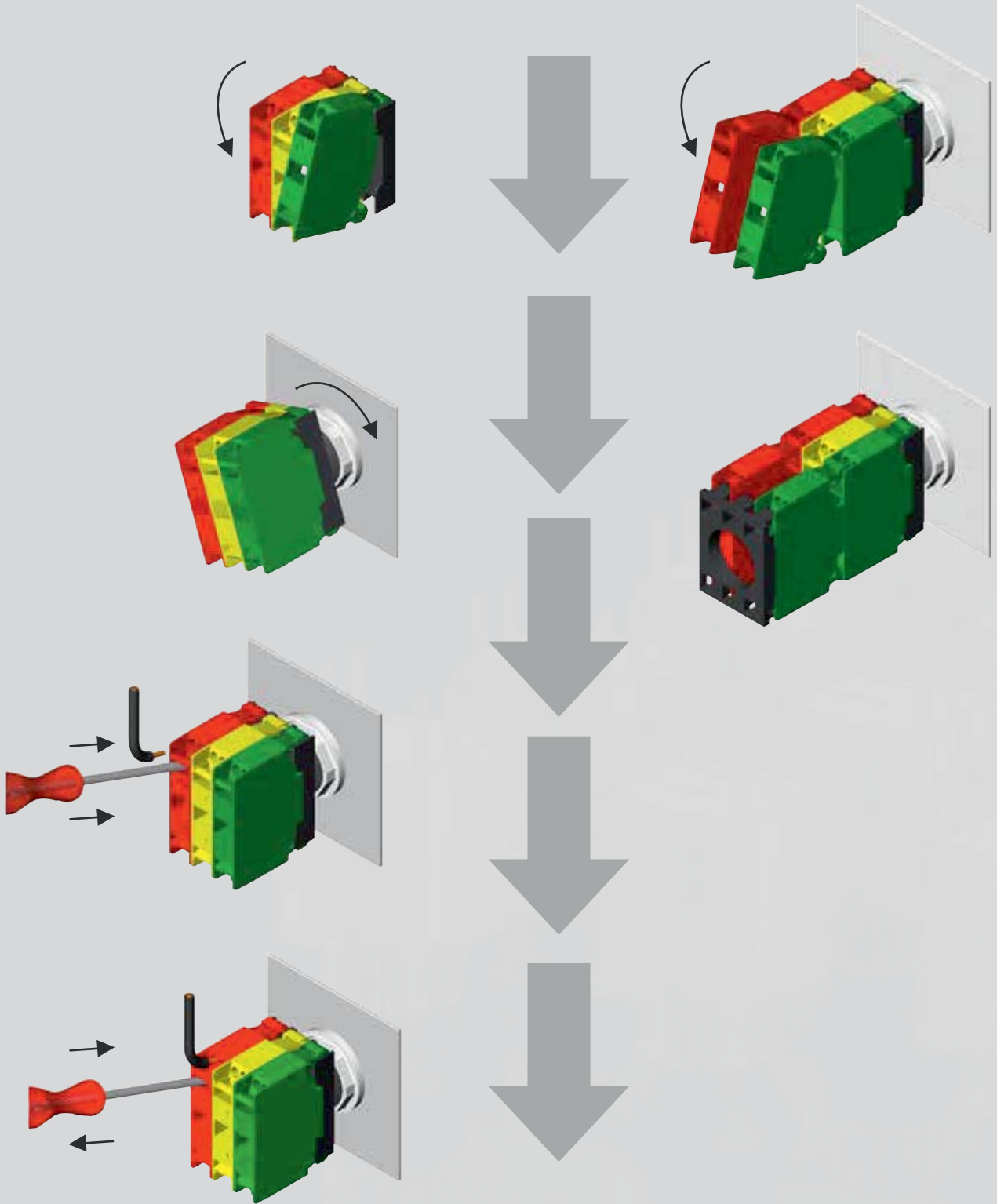


Illustration	Description	Type
<p>16mm</p> <p>0 1 2 3 4 5 6 7</p> <p>.1/2</p>	<p>Modular Contact Block, momentary 1NC Cage-Clamp 0.08-2.5 mm²</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DTO
<p>16mm</p> <p>0 1 2 3 4 5 6 7</p> <p>.5/6</p>	<p>Modular Contact Block, momentary 1NC late break Cage-Clamp 0.08-2.5 mm²</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DTON
<p>16mm</p> <p>0 1 2 3 4 5 6 7</p> <p>.3/4</p>	<p>Modular Contact Block, momentary 1NO Cage-Clamp 0.08-2.5 mm²</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DTI
<p>16mm</p> <p>0 1 2 3 4 5 6 7</p> <p>.7/8</p>	<p>Modular Contact Block, momentary 1NO early make Cage-Clamp 0.08-2.5 mm²</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DTIV
<p>16mm</p> <p>X1 ⊗ X2</p>	<p>Lamp Module Cage-Clamp 0.5-2.5 mm² max. 250V 2W lamp socket BA9S</p> <p>suitable actuators/pilot light heads</p> <p>colour yellow</p>	DL
<p>16mm</p> <p>-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7</p> <p>.1/2</p> <p>Betätiger aufgerastet, in Ruhestellung</p>	<p>Self-monitoring Emergency Contact Block, momentary* 1NC + 1 safety contact Cage-Clamp 0.08-2.5 mm²</p> <p>*1) 1 NC, 1NO and 1safety contact consisting of 1 emergency NC connected in series to 1 NO which is always closed during operation and disconnects automatically on separation of the actuator from the modular contact.</p> <p>suitable actuators</p> <p>contact material AgNi</p>	DMTOSFA






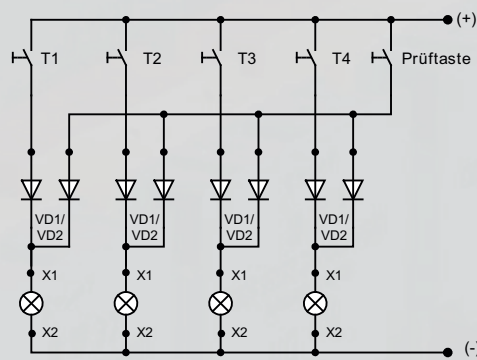
Illustration	Description	Type
	<p>Dummy Module used in case of several levels to fill the positions not occupied colour grey</p>	<p>DB</p>
	<p>Module Holder for 3 modules with bayonet, to combine the modular contact blocks with the actuators</p>	<p>DMR</p>
	<p>Module Holder for modules from second level on</p>	<p>DMA</p>
	<p>Ultra-bright LED BA9s with integrated bridge rectifier for 24V AC/DC, 15mA colour blue green red white yellow</p>	<p>LD9-24UB LD9-24UG LD9-24UR LD9-24UW LD9-24UY</p>
	<p>Mega-bright LED, BA9s with integrated bridge rectifier for 24V .. 28V AC/DC, 15.5mA colour blue green red white yellow</p>	<p>LD9-24MB LD9-24MG LD9-24MR LD9-24MW LD9-24MY</p>
	<p>Ultra-bright LED, BA9s with integrated single-wave rectifier for 230V AC, 3mA colour blue green red white yellow</p>	<p>LD9-230UB LD9-230UG LD9-230UR LD9-230UW LD9-230UY</p>

Illustration	Description	Type
	Flashing LED, BA9s for 24V colour green LB9-24G red LB9-24R yellow LB9-24Y	
	Incandescent Lamp BA9s Technical Data 12V / 2,0W (166mA) FZR9-12 24V / 2,0W (80mA) FZR9-24 30V / 2,0W (66mA) FZR9-30 36V / 2,0W (55mA) FZR9-36 48V / 2,0W (40mA) FZR9-48 60V / 1,2W (20mA) FZR9-60-1 110 ... 130V / 2,6W (20mA) FZR9-130	





DC Lamp Testing Unit **VD2**

entirely sealed, with two screw connections for 2.5 mm², with two integrated diodes 400 V/1A isolating the lamp line from the test line. For DC only.