DATASHEET - T6-160-6/I45/SVB-SW/HI11



Main switch, T6, 160 A, surface mounting, 6 contact unit(s), 6 pole, 1 N/O, 1 N/C, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position



Part no. T6-160-6/I45/SVB-SW/HI11 Catalog No. 201447

Main white maintenance which Repair switch R				
Part group reference Stop Function Stop Function With beats rotary handle and locking ring Enclassar without Images with KSS IN SIR. Fill a dampf plate insurt order separately, see CI insulated enclosure >> accession Number of poles Auxiliary contacts NO 1 No 1 No 1 Lockable in the 0 (OR) position PPS Including insulated Surpression No 1 Lockable in the 0 (OR) position PPS Including insulated Surpression Design Southers sequence Southers sequ	Delivery program			
Stop Function With black totally handle and locking ring Enclosure without flagpes with KSK-INDER Fil.4 gland plate insert order separately, see Cl insulated enclosure -> accessorie Runcher of poles Auxiliary contacts N/O 1 Lockable in the 0 (0ff position IPSS Lockable in the 0 (0f	Product range			maintenance switch
With black rotary handle and locking ring Enclosure without flanges with KSS/1N/BER Pland pitter insert order separately, see Cl insulated enclosure > accessorie 8 pole NO 1 NC 1 Lockable in the 0 (0ff) position Design Design Contact sequence Service mounting Service mounting Trunction Motor rating AC-23A, 50 - 60 Hz 400 V P IW 55 Read uninterrupted current I ₀ is specified for mox. cross-section. With black rotary handle and locking ring Enclosure without affaines with KSS/1N/BER Pland uninterrupted current I ₀ is specified for mox. cross-section. With black rotary handle and locking ring Enclosure without affaines with KSS/1N/BER Pland uninterrupted current I ₀ is specified for mox. cross-section. With black rotary handle and locking ring Enclosure without affaines with KSS/1N/BER Pland uninterrupted current I ₀ is specified for mox. cross-section.	Part group reference			Т6
Information about equipment supplied Number of poles Auxiliary contacts Not 1 Not 1 Lockable in the 0 (0ff) position Personal Person	Stop Function			STOP function
FL4 pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order separately, see Cl insulated enclosure >> accessorii Fuel pland plate insort order in the U010ff pestion Fuel pland				With black rotary handle and locking ring
Auxiliary contacts NO	Information about equipment supplied			Enclosure without flanges with K95/1N/BR. FL4 gland plate insert order separately, see CI insulated enclosure -> accessorie
N/C 1 Lockable in the 0 (0ff) position Degree of Protection Design Contact sequence Switching angle Swi	Number of poles			6 pole
N/C 1 Lockable in the 0 (0ff) position Degree of Protection Design Contact sequence Switching angle Swi	Auxiliary contacts			
N/C Locking facility Locking facility Degree of Protection Design Contact sequence Contact sequence Switching angle Design umber Function Motor rating AC-23A, 50 - 60 Hz 400			N/0	1
Locking facility Degree of Protection PP5 Totally insulated Surface mounting Surface mounting Contact sequence Switching angle Design number Function Motor reting AC-23A, 50 - 60 Hz 400 V P KW 55 Rated uninterrupted current I _u is specified for max. cross-section. Note on rated uninterrupted current I _u is specified for max. cross-section.	1		N/O	
Design Design Contact sequence Contact sequence Switching angle Design umber Function Motor rating AC-23A, 50 - 60 Hz 400 V P KW 55 Rated uninterrupted current I _u is specified for max. cross-section. Number of contact uninterrupted current I _u is specified for max. cross-section.	7		N/C	
Design Contact sequence Contact sequence Switching angle Performance 160 Motor rating AC-23A, 50 - 60 Hz 400 V AV VOV P VOV AV VOV P VOV State mounting TON OFF Rated uninterrupted current I _u is specified for max. cross-section. Number of contact units Contact sequence Surface mounting Surface mounting Surface mounting Surface mounting Surface mounting TON OFF State Sta	Locking facility			Lockable in the 0 (Off) position
Design Surface mounting Surf	Degree of Protection			IP65
Contact sequence Contact sequ				totally insulated
Switching angle Pesign number Function Motor rating AC-23A, 50 - 60 Hz 400 V Rated uninterrupted current Iu A 160 Rated uninterrupted current Iu Number of contact units Position Residual and a separate an	Design			surface mounting
Switching angle Pesign number Function Motor rating AC-23A, 50 - 60 Hz 400 V Rated uninterrupted current Iu A 160 Rated uninterrupted current Iu Number of contact units Position Residual and a separate an				
Design number Function ION	Contact sequence			
Function ION OFF	Switching angle		o	90
Motor rating AC-23A, 50 - 60 Hz 400 V Rated uninterrupted current Iu A 160 Rated uninterrupted current I _u is specified for max. cross-section. Number of contact units Contact 6	Design number			160
400 V Rated uninterrupted current Iu A 160 Rated uninterrupted current Iu is specified for max. cross-section. Number of contact units contact 6	Function			
Rated uninterrupted current Iu A 160 Note on rated uninterrupted current !u Number of contact units Contact 6	Motor rating AC-23A, 50 - 60 Hz			
Rated uninterrupted current Iu A 160 Note on rated uninterrupted current !u Number of contact units Contact 6	400 V	Р	kW	55
Note on rated uninterrupted current I _u Rated uninterrupted current I _u is specified for max. cross-section. Number of contact units contact 6		Iu		
Number of contact units contact 6		ū		
	Muniper of Contact units		unit(s)	U

Technical data General

Standards	IEC/EN 60947, VDE 0660, IEC/EN 60204

			Switch-disconnector according to IEC/EN 60947-3
Climatic proofing			Damp heat, constant, to IEC 60068-2-78
			Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			111/3
Rated impulse withstand voltage	U _{imp}	V AC	8000
Mounting position			As required
Contacts Mechanical variables			
Number of poles			£ nolo
Auxiliary contacts			6 pole
Auxiliary contacts		N/O	1
		N/C	1
Electrical characteristics		IV/C	'
	11	V AC	690
Rated operational voltage	U _e		
Rated uninterrupted current	Iu	Α	160
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I _e	2
AB 40 % DF		x I _e	1.6
AB 60 % DF		x I _e	1.3
Short-circuit rating			
Fuse		A gG/gL	160
Rated short-time withstand current (1 s current)	I _{cw}	A_{rms}	3000
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	30
Switching capacity			
$\cos \phi$ rated making capacity as per IEC 60947-3		Α	1600
Rated breaking capacity $\cos \phi$ to IEC 60947-3		Α	
230 V		Α	1280
400/415 V		Α	900
500 V		Α	880
690 V		Α	340
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I _e		W	11
Current heat loss per auxiliary circuit at $I_{\rm e}$ (AC-15/230 V)		CO	0.2
Lifespan, mechanical	Operations	x 10 ⁶	> 0.1
Maximum operating frequency	Operations/h		50
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	P	kW	30
230 V Star-delta	Р	kW	30
400 V 415 V	Р	kW	45
400 V Star-delta	Р	kW	45
500 V	P	kW	55
500 V Star-delta	Р	kW	55
690 V	Р	kW	37
690 V Star-delta	Р	kW	37
Rated operational current motor load switch			
230 V	l _e	Α	103
230 V star-delta	I _e	Α	103

400 V story dollar		٨	or.
400 V star-delta	l _e	A	85
500 V	l _e	Α	78
500 V star-delta	l _e	Α	78
690 V	l _e	Α	42
690 V star-delta	l _e	Α	42
AC-21A			
Rated operational current switch			
440 V	l _e	Α	160
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	Р	kW	30
400 V 415 V	Р	kW	55
500 V	P	kW	75
690 V	Р	kW	37
Rated operational current motor load switch		^	100
230 V	l _e	A	103
400 V 415 V	l _e	Α	105
500 V	l _e	Α	106
690 V	l _e	Α	42
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l _e	Α	125
Voltage per contact pair in series		V	42
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l _e	Α	125
Contacts		Quantity	1
48 V			
Rated operational current	l _e	Α	125
Contacts		Quantity	2
60 V			
Rated operational current	l _e	Α	125
Contacts		Quantity	3
120 V			
Rated operational current	l _e	Α	50
Contacts		Quantity	3
DC-13, Control switches L/R = 50 ms			
Rated operational current	l _e	A	125
Voltage per contact pair in series		V 	24
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
Terminal capacities	,		
Solid or stranded		mm^2	1 x 70
Florible with forrulas to DIM 46239		2	2 x 35
Flexible with ferrules to DIN 46228		mm ²	1 x 50 2 x 25
Copper strip	Number of	mm	1 x 13 x 3
	segments x width x		2 x 13 x 1.5
	thickness		
Terminal screw			M5, Inbus
Tightening torque for terminal screw		Nm	4.5
Technical safety parameters: Notes			$\mathrm{B10_{d}}$ values as per EN ISO 13849-1, table C1
Rating data for approved types			Sing values as per Livino 10045-1, table of
Terminal capacity			
Terminal screw			M5, Inbus

Tightening torque	lb-in 39.8
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Design verification as per IEC/EN 61439

Design Verification as per IEG/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	160
Heat dissipation per pole, current-dependent	P _{vid}	W	11
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			UV resistance only in connection with protective shield.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 7.0

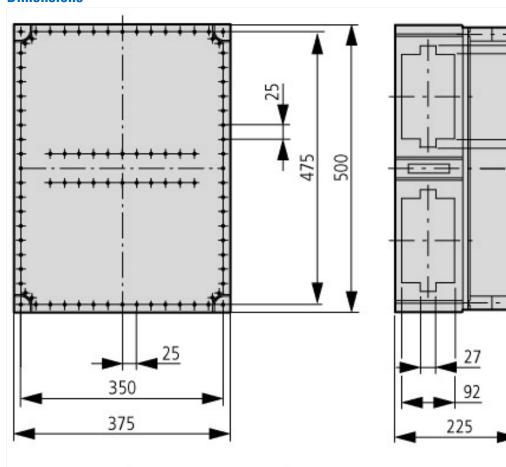
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

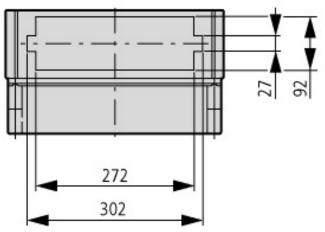
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

	Yes
	Yes
	No
	No
	No
	1
V	690
V	690 - 690
Α	160
Α	105
Α	160
kW	45
	V V A A A kW

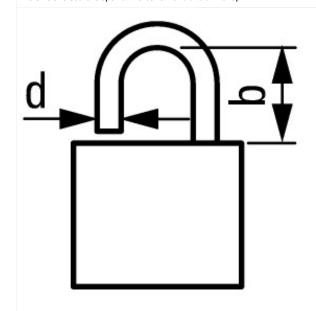
Rated operation power at AC-23, 400 V			
Switching power at 400 V kW 55 Conditioned rated short-circuit current Iq kA 5 Number of poles 6 6 Number of auxiliary contacts as normally closed contact 1 1 Number of auxiliary contacts as normally open contact 1 1 Number of auxiliary contacts as change-over contact 0 No Motor drive optional No No Motor drive integrated No Complete device in housing Voltage release optional No Complete device in housing Suitable for ground mounting Yes No Suitable for front mounting 4-hole No No Suitable for front mounting centre No No Suitable for intermediate mounting No No Suitable for intermediate mounting No No Colour control element Door coupling rotary drive Interlockable Yes Type of electrical connection of main circuit Other Degree of protection (IP), front side IP65	Rated short-time withstand current lcw	kA	3
Conditioned rated short-circuit current Iq kA 5 Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive integrated No No No No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side	Rated operation power at AC-23, 400 V	kW	55
Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact No Motor drive optional No Motor drive integrated No Voltage release optional No Device construction Complete device in housing Ves Suitable for ground mounting Ves Suitable for front mounting 4-hole No Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation No Suitable for intermediate mounting No Colour control element No Colour control element Degree of protection of main circuit Degree of protection (IP), front side Ne Side No Side N	Switching power at 400 V	kW	55
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional Motor drive integrated No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side I 1 1 No Complete device in housing No No No No Suitable for intermediate mounting centre Black Type of control element Type of electrical connection of main circuit Degree of protection (IP), front side	Conditioned rated short-circuit current Iq	kA	5
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for intermediate mounting Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Door coupling rotary drive Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side I 1 O 0 O 0 O 0 O 0 O 0 O 0 O 0 O	Number of poles		6
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Degree of protection of main circuit Degree of protection (IP), front side No No No No No No No No No N	Number of auxiliary contacts as normally closed contact		1
Motor drive optional Motor drive integrated No No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for firont mounting centre No Suitable for intermediate mounting Suitable for intermediate mounting Suitable for intermediate mounting Colour control element Type of electrical connection of main circuit Degree of protection (IP), front side	Number of auxiliary contacts as normally open contact		1
Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Complete device in housing Yes No No No Suitable for intermediate mounting No Other Degree of protection (IP), front side	Number of auxiliary contacts as change-over contact		0
Voltage release optional Device construction Complete device in housing Yes Suitable for ground mounting Suitable for front mounting 4-hole No Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Complete device in housing Yes No No Do Complete device in housing Yes No Ocupling rotary drive Yes Other	Motor drive optional		No
Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Complete device in housing Yes No On On On On On On On On On O	Motor drive integrated		No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation No Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Yes No O O O O O O O O O O O O O O O O O O	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting centre No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No Ook No No Door coupling rotary drive Other Degree of protection (IP), front side No No No Ook No No Ook No No Ook No No Ook No Ook No Ook No No Ook No Ook No No Ook No Ook No Ook No No Ook No Ook No Ook No Ook No No Ook No No Ook No Ook No No Ook No Ook No No Ook No Ook No Ook No Ook No Ook No Ook No Ook No No Ook No Ook No No Ook No No Ook No Ook No No Ook No No Ook No Ook No No Ook No No Ook No No No Ook No Ook No No No Ook No No No Ook No No Ook No No Ook No No No Ook No No Ook No No No No Ook No No Ook No No Ook No No No Ook No No No Ook No No Ook No No No Ook No No No Ook No No No Ook No No Ook No No No Ook No No No No Ook No No No No No Ook No No No No No No No No No	Device construction		Complete device in housing
Suitable for front mounting centre Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No No Door coupling rotary drive Other Degree of protection (IP), front side	Suitable for ground mounting		Yes
Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No No Black Yes Yes Type of electrical connection of main circuit Degree of protection (IP), front side	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side No Black Door coupling rotary drive Yes Type of electrical connection of main circuit Other IP65	Suitable for front mounting centre		No
Colour control element Type of control element Door coupling rotary drive Yes Type of electrical connection of main circuit Degree of protection (IP), front side Black Type of control element Other IP65	Suitable for distribution board installation		No
Type of control element Interlockable Type of electrical connection of main circuit Degree of protection (IP), front side Door coupling rotary drive Yes Other IP65	Suitable for intermediate mounting		No
Interlockable Yes Type of electrical connection of main circuit Other Degree of protection (IP), front side IP65	Colour control element		Black
Type of electrical connection of main circuit Degree of protection (IP), front side Degree of protection (IP), front side Other IP65	Type of control element		Door coupling rotary drive
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Other
Degree of protection (NEMA) Other	Degree of protection (IP), front side		IP65
	Degree of protection (NEMA)		Other

Dimensions





The CI45 enclosure is open at the bottom and and at the top!



d = 4 - 8 mm $b + d \le 47 \text{ mm}$ d = 0.16 - 0.31 d = 0.85

Additional product information (links)

IL03801017Z (AWA1150-1606) Rotary switch: Main switch ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801017Z2018_04.pdf IL03801017Z (AWA1150-1606) Rotary switch: Main switch Display flip catalog page. http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=57 Technical overview cam switch, switchhttp://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2 disconnector System overview cam switch T http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4 System overview switch-disconnector P http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6 $\ \, \text{Key to part numbers Cam switch} \\$ http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8 Key to part numbers Switch-disconnector Switches for ATEX http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html