DATASHEET - P1-25/E-RT/HI11



On-Off switch, P1, 25 A, flush mounting, 3 pole, 1 N/O, 1 N/C, Emergency switching off function, with red thumb grip and yellow front plate



Part no. P1-25/E-RT/HI11 Catalog No. 002600



Similar to illustration

Similar to illustration			
Delivery program			
Product range			On-Off switch
Part group reference			P1
Stop Function			Emergency switching off function
			with red thumb grip and yellow front plate
Information about equipment supplied			Auxiliary contact or neutral conductor fitted by user.
Number of poles			3 pole
Auxiliary contacts			
r		N/0	1
7		N/C	1
Degree of Protection			Front IP65
Design			flush mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Front plate no.			FS 908 GE
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	11
Rated uninterrupted current	Iu	Α	25
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.

Technical data

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General		
Standards		IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL 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		
Open	°C	C -25 - +50

Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U _{imp}	V AC	6000
Mechanical shock resistance	·····p	g	15
Mounting position		9	As required
Contacts			7.6.10quillo
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/0	1
		N/C	1
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	Iu	Α	25
Note on rated uninterrupted current !u			Rated uninterrupted current I _u is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF			1.3
		x l _e	1.0
Short-circuit rating		A =: C/=:I	ar.
Fuse		A gG/gL	
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	640
Note on rated short-time withstand current lcw	-		Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	50
Switching capacity cos φ rated making capacity as per IEC 60947-3		Α	240
Rated breaking capacity os ϕ to IEC 60947-3		A	240
230 V		A	190
400/415 V		A	150
500 V		A	170
690 V		A	150
Safe isolation to EN 61140		,	
between the contacts		V AC	440
Current heat loss per contact at I _e		W	1.1
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	0.2
	Onevetiene		
Lifespan, mechanical	Operations	x 10 ⁶	> 0.3
Maximum operating frequency	Operations/h		1200
AC			
AC-3	-		
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	5.5
400 V 415 V	P	kW	7.5
500 V	P	kW	7.5
690 V	P	kW	7.5
Rated operational current motor load switch			
230 V	l _e	Α	19.6
400V 415 V	I _e	Α	15.2
500 V	l _e	Α	12.1
690 V	l _e	Α	8.8
AC-21A			
Rated operational current switch			
440 V	I _e	Α	25
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	

230 V	Р	kW	5.5
400 V 415 V	Р	kW	11
500 V	Р	kW	11
690 V	Р	kW	11
Rated operational current motor load switch			
230 V	le	Α	25
400 V 415 V	I _e	Α	25
500 V	I _e	A	17.4
690 V	I _e	A	12.6
DC	ŭ		
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	25
Voltage per contact pair in series	C	V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	1
48 V		,	
Rated operational current	I _e	Α	25
Contacts		Quantity	
60 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	
120 V		,	
Rated operational current	I _e	Α	12
Contacts		Quantity	3
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
	probability		(To / C Talliano III 100/1000 of the land III
Terminal capacities Solid or stronged	probability	2	
Terminal capacities Solid or stranded	probability	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6)
	probability	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4)
Solid or stranded Flexible with ferrules to DIN 46228	probability		1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4)
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw	probability	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw	probability		1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4)
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw	probability	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes	probability	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters:	probability	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types	probability U _e	mm ²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts		mm²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage		mm²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max.		mm²	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths		mm ² Nm	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use		mm ² Nm	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts	Ue	mm ² Nm VAC	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty	Ue	mm ² Nm VAC	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity	Ue	mm ² Nm VAC	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating	Ue	mm ² Nm VAC	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase	Ue	mm² Nm VAC	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 10 A 600 P 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC	Ue	mm² Nm V AC A	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600 P 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase	Ue	mm² Nm VAC	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600 P 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC	Ue	mm² Nm V AC A HP HP	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600 P 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC	Ue	mm² Nm V AC A HP HP	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600 P 600
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase	Ue	mm² Nm V AC A HP HP	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600 P 600 1 2 3
Solid or stranded Flexible with ferrules to DIN 46228 Terminal screw Tightening torque for terminal screw Technical safety parameters: Notes Rating data for approved types Contacts Rated operational voltage Rated uninterrupted current max. Main conducting paths General use Auxiliary contacts General Use Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase 200 V AC	Ue	mm² Nm V AC A A HP HP HP	1 x (1,5 - 6) 2 x (1,5 - 6) 1 x (1 - 4) 2 x (1 - 4) M4 1.6 B10 _d values as per EN ISO 13849-1, table C1 600 20 10 A 600 P 600 1 2 3 3

600 V AC	HP	15
Short Circuit Current Rating	SCCR	
Basic Rating	kA	5
max. Fuse	Α	110
High fault rating	kA	10
max. Fuse	Α	50, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	14 - 8
Terminal screw		M4
Tightening torque	lb-in	14.1

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	25
Heat dissipation per pole, current-dependent	P _{vid}	W	1.1
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	50
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 switch gear must be observed. $\label{eq:specification}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
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)

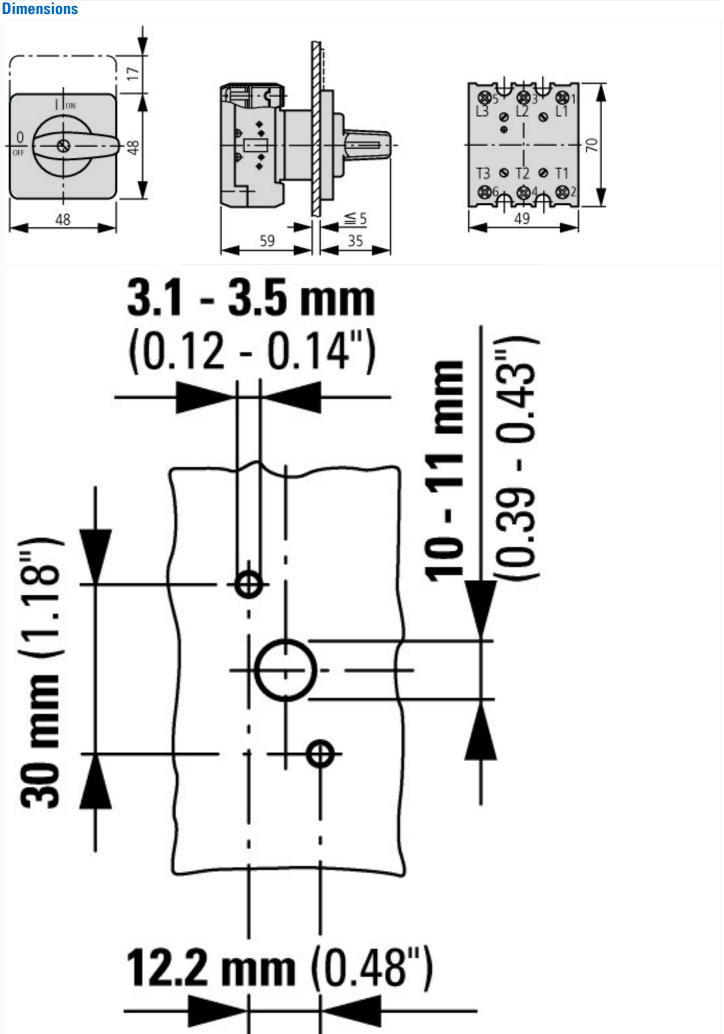
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

[AKF060013])	
Version as main switch	No
Version as maintenance-/service switch	No
Version as safety switch	No

Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	25
Rated permanent current at AC-23, 400 V	Α	25
Rated permanent current at AC-21, 400 V	Α	25
Rated operation power at AC-3, 400 V	kW	7.5
Rated short-time withstand current lcw	kA	0.64
Rated operation power at AC-23, 400 V	kW	13
Switching power at 400 V	kW	13
Conditioned rated short-circuit current Iq	kA	80
Number of poles		3
Number of auxiliary contacts as normally closed contact		1
Number of auxiliary contacts as normally open contact		1
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Built-in device fixed built-in technique
Suitable for ground mounting		No
Suitable for front mounting 4-hole		Yes
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Red
Type of control element		Toggle
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12

Approvals

marking UL File No. E36332 UL Category Control No. NLRV CSA File No. 12528 CSA Class No. 3211-05 North America Certification UL listed, CSA certified Suitable for Branch circuits, suitable as motor disconnect	• •	
UL Category Control No. CSA File No. 12528 CSA Class No. 3211-05 North America Certification UL listed, CSA certified Suitable for Branch circuits, suitable as motor disconnect	Product Standards	
CSA File No. CSA Class No. 12528 CSA Class No. 12528 CSA Class No. UL listed, CSA certified Suitable for Branch circuits, suitable as motor disconnect	UL File No.	E36332
CSA Class No. 3211-05 North America Certification UL listed, CSA certified Suitable for Branch circuits, suitable as motor disconnect	UL Category Control No.	NLRV
North America Certification UL listed, CSA certified Suitable for Branch circuits, suitable as motor disconnect	CSA File No.	12528
Suitable for Branch circuits, suitable as motor disconnect	CSA Class No.	3211-05
	North America Certification	UL listed, CSA certified
Degree of Protection IEC: IP65; UL/CSA Type 1, 12	Suitable for	Branch circuits, suitable as motor disconnect
	Degree of Protection	IEC: IP65; UL/CSA Type 1, 12



Assets (links)

Declaration of CE Conformity

00003102

Instruction Leaflets

IL03802003Z2018_04

Additional product information (links)

IL03802003Z (AWA1150-1890) Switch-disconnectors for flush mounting		
IL03802003Z (AWA1150-1890) Switch- disconnectors for flush mounting	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03802003Z2018_04.pdf	
Technical overview cam switch, switch-	http://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.moeiler.net/flip-cat/?edition=HPLTEv1&startpage=4.6	
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8	
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8	
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html	
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/D0CUMENTATION/PDF/MZ008005ZU_Orderform_Customized_Switch.pdf	
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008006ZU_Orderform_Customized_Switch.pdf	