

Multi-speed switches, T3, 32 A, rear mounting, Basic switch, 4 contact unit(s), Contacts: 8, 45 $^{\circ}$, Design number 8440



Part no. T3-4-8440/XZ Catalog No. 020627

D. P.			
Delivery program			
Product range			Control switches
Part group reference			T3
Basic function			Multi-speed switches
Contacts			8
Design			rear mounting Basic switch
Contact sequence			
switching function			tapped winding
Switching angle		0	45
Design number			8440
Front plate no.			FS 644
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	15
Rated uninterrupted current	l _u	Α	32
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	4

Technical data

AB 40 % DF

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			
Open		°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		g	15
Mounting position			As required
Contacts			
Electrical characteristics			
Rated operational voltage	U_{e}	V AC	690
Rated uninterrupted current	I _u	Α	32
Note on rated uninterrupted current $\boldsymbol{I}_{\boldsymbol{u}}$			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l _e	2

 $x \: I_e$

1.6

Substitute Sub	12	w.l		AD CO 0/ DE
Fise A golyl 35 Rated short-time withstand current (is current) Inw Arm 600 Nate or nated short-time withstand current (con Inw Ax 100 Rated conditional short-circuit current In Ax 10 South Inw Ax 200 Execution in Execution (and shing capacity case to IEE 60947-3 Ax 200 400,415 V Ax 20 500 V Ax 20 880 V Ax 20 500 V Ax 40 680 V Ax 40 680 V Ax 40 680 V Ax 40 680 V Ax 40 Current heat loss per contact at l _e (Ax-15230 V) Bx 40 Litespan, mechanical Operations	1.3	x I _e		AB 60 % DF
Retor dunot-time withstand current (w I _{ca} A _{max} bits 550 Nate on rated short-time withstand current kew I _q ka 1<				
Note on rated short-time withstand current tow Iq kA 1 town of 1 second Switching capacity Iq kA 1 Switching capacity as per IEC 60947-3 A 20 Rated breaking capacity cos q to IEC 60947-3 A 280 500 V A 280 500 V A 280 500 V A 280 500 V A 240 680 V A 240 Sate isolation to Not 1140 B VAC 440 Current heat loss per contacts VAC 440 Current heat loss per contact at I _e V V 1.1 Current heat loss per contact at I _e V V 1.2 AC Department of the properties	35	A gG/gL		
Retact conditional short-circuit current Iq IA 1 Switching capacity See rated making capacity so per IEC 60947-3 A 300 220 V A 260 440(415 V) A 260 5500 V A 260 680 V A 200 She soloaton to RN 61140 VAC 400 between the contacts VAC 440 Current heat loss per contact at I _q VAC 400 Current heat loss per auxiliary circuit at I _q (AC-15/220 V) C 11 Litespan, machanical Operationsh 200 20 Maximum operating frequency Querationsh 200 20 AC AC 300 300 Rating, motor load switch P KW 55 220 V 220 V P KW 15 400 V 41 V P KW 15 500 V Sout - delta P KW 15 600 V Sout - delta P KW 15	650	A _{rms}	I _{cw}	Rated short-time withstand current (1 s current)
Switching capacity Service of making capacity as per IEC 69947-3 A 320 Rated breaking capacity cos g to IEC 69947-3 A 260 230 V A 260 500 V A 20 698 V A 20 Safe isolation to EN 61140 A 20 between the contact at I ₀ VAC 440 Current hear loss per contact at I ₀ VAC 440 Current hear loss per auxiliary circuit at I ₀ (AC-13/239 V) Depressions/h 1220 AC Operations 1220 AC AC 40.5 AC Depressions/h 1220 AC AC 2.5 AC AC 3.0	Current for a time of 1 second			Note on rated short-time withstand current lcw
cos o rated making capacity as per IEC 60947-3 A 320 Rated breaking capacity cos or to IEC 60947-3 A 260 400/415 V A 200 500 V A 240 680 V TO A 240 Sels isolation to EN 61140 V 440 V between the contacts V V 440 Current heat loss per contact at I ₆ V V 1.1 Current heat loss per auxiliary circuit at I ₆ IAC-15/230 V) V 1.1 Lifespan, mechanical Operations X 1.9° > 0.5 Maximum operating frequency Operations X 1.9° > 0.5 AC-3 Resting, motor load switch P kW 5.5 220 V 230 V P kW 5.5 230 V Star-delta P kW 1.5 400 V 415 V P kW 1.5 500 V Star-delta P kW 1.5 680 V Star-delta P kW 1.5 680 V Star-delta	1	kA	I_q	Rated conditional short-circuit current
Rated breaking capacity cos q to IEC 60947-3 A 80 200 V A 20 400/415 V A 20 500 V A 20 660 V A 170 Sele isolation to EN 8140 V 40 between the contacts VAC 440 Current heat loss per contact at 1 ₀ C 0 Current heat loss per condiatory circuit at 1 ₀ (AC-15/230 V) C 0 1.1 Lifespan, mechanical Operations N 20 P > 0.5 Maximum operating frequency Operations N 120 P > 0.5 AC-3 T 120 P 120 P 120 P 2 20 V 200 V P kW 5.5 120 P 2 30 V Star-delta P kW 15 120 P 4 00 V 415 V P kW 15 120 P 4 00 V Star-delta P kW 15 120 P 6 690 V P kW 15 120 P 7 230 V Star-delta P				
250 V	320	Α		$\cos \phi$ rated making capacity as per IEC 60947-3
AQQ/415 V A 240		Α		Rated breaking capacity cos φ to IEC 60947-3
Sol A 240 A 170	260	Α		230 V
A 170 Safe isolation to EN 61140 Safe	260	Α		400/415 V
Safe isolation to EN 61140 VAC 440 between the contacts VAC 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) C0 1.1 Lifespan, mechanical Operations X 10 ⁸	240	Α		500 V
Detween the contacts Current heat loss per contact at I _e Current heat loss per contact at I _e Current heat loss per contact at I _e Current heat loss per auxiliary circuit at I _e (AC-15/230 V) CD 1.1	170	Α		690 V
Current heat loss per ountact at I₀ Current heat loss per auxiliary circuit at Iॄ (AC-15/230 V) V 1.1 Lifespan, mechanical Operations/h × 10 ⁶ > 0.5 Maximum operating frequency Operations/h 1200 AC-3 Telegram, motor load switch P VW 220 V 230 V P kW 5.5 230 V Star-delta P kW 11 400 V 415 V P kW 15 500 V P kW 15 500 V Star-delta P kW 15 690 V Star-delta P kW 15 690 V Star-delta P kW 15 690 V Star-delta P kW 12 690 V Star-delta P kW 22 Rated operational current motor load switch Io A 23.7 230 V star-delta Io A 23.7 400 V star-delta Io A 23.7 400 V star-delta Io A 23.7 500				Safe isolation to EN 61140
Current heat loss per auxiliary circuit at I _e (AC-15/230 V) CO 1.1 Lifespan, mechanical Operations x 10 ⁶ > 0.5 Maximum operating frequency Operations/h 1200 AC-3 To 100 100 AC-3 Rating, motor load switch P kW 220 V 230 V P kW 5.5 230 V Star-delta P kW 11 400 V 415 V P kW 15 500 V Star-delta P kW 15 500 V Star-delta P kW 11 690 V Star-delta P kW 12 880 V Star-delta P kW 22 Rated operational current motor load switch Ie A 23.7 230 V star-delta Ie A 23.7 400 V star-delta Ie A 23.7 400 V star-delta Ie A 23.7 500 V star-delta Ie A 23.7 690 V star-delta Ie	440	V AC		between the contacts
Lifespan, mechanical Operations/h x 108 > 0.5 Maximum operating frequency Operations/h x 108 > 0.5 AC-3 AC-3 Company (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	1.1	W		Current heat loss per contact at I _e
Maximum operating frequency Operations/h 1200 AC-3	1.1	CO		Current heat loss per auxiliary circuit at I _e (AC-15/230 V)
Ac-a Ac-b Label Sections of the control	> 0.5	x 10 ⁶	Operations	Lifespan, mechanical
AC-3 Rating, motor load switch 220 V 230 V P kW 230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V P kW 15 500 V P kW 15 690 V P kW 11 690 V Star-delta P kW 12 Rated operational current motor load switch 230 V star-delta P kW 12 Rated operational current motor load switch 1e A 23.7 230 V star-delta 1e A 23.7 400 V 415 V 1e A 23.7 400 V 5tar-delta 1e A 23.7 500 V 1e A 23.7 400 V star-delta 1e A 23.7 400 V star-delta 1e A 23.7 690 V star-delta 1e A 23.7 690 V star-delta 1e A 23.7 400 V star-delta 1e A 23.7 400 V star-delta 1e A 23.7 690 V star-delta 1e A 23.7 690 V star-delta 1e A 23.7	1200	·	Operations/h	
AC-3 Rating, motor load switch P kW 220 V 230 V P kW 5.5 230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V P kW 15 500 V Star-delta P kW 11 690 V P kW 11 690 V Star-delta P kW 11 890 V Star-delta P kW 11 230 V star-delta P kW 22 Rated operational current motor load switch V 23.7 230 V star-delta Ie A 23.7 400 V star-delta Ie A 23.7 500 V star-delta Ie A 23.7 500 V star-delta Ie A 23.7 690 V star-delta Ie A 32 690 V star-delta Ie A 14.7 690 V star-delta Ie A 25.5				
Rating, motor load switch P kW 220 V 230 V P kW 5.5 230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V P kW 18.5 690 V P kW 11 690 V Star-delta P kW 12 Rated operational current motor load switch V 22 Rated operational current motor load switch V 23.7 230 V star-delta Ie A 23.7 400 V star-delta Ie A 23.7 400 V star-delta Ie A 23.7 500 V star-delta Ie A 23.7 500 V star-delta Ie A 23.7 690 V star-delta Ie A 32 690 V star-delta Ie A 32 690 V star-delta Ie A 25.5				
220 V 230 V P kW 5.5 230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V Star-delta P kW 15 500 V Star-delta P kW 18.5 690 V P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch		kW	Р	
230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V P kW 15 500 V Star-delta P kW 18.5 690 V P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch	5.5			
400 V Star-delta				
400 V Star-delta P KW 15 500 V P KW 15 500 V Star-delta P KW 18.5 690 V P KW 11 690 V Star-delta P KW 22 Rated operational current motor load switch 230 V le A 23.7 230 V star-delta le A 32 400 V 415 V le A 23.7 400 V star-delta le A 32 500 V le A 32 500 V le A 32 500 V le A 32 690 V le A 32 690 V star-delta le A 25.5				
500 V P kW 15 500 V Star-delta P kW 18.5 690 V P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch				
500 V Star-delta P kW 18.5 690 V P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch 230 V Ie A 23.7 230 V star-delta Ie A 32 400 V 415 V Ie A 23.7 400 V star-delta Ie A 32 500 V Ie A 23.7 500 V star-delta Ie A 23.7 690 V star-delta Ie A 32 690 V star-delta Ie A 14.7 690 V star-delta Ie A 25.5				
690 V P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch				
690 V Star-delta P kW 22 Rated operational current motor load switch 230 V I _e A 23.7 230 V star-delta I _e A 32 400 V star-delta I _e A 23.7 400 V star-delta I _e A 23.7 500 V I _e A 23.7 500 V star-delta I _e A 32 690 V I _e A 14.7 690 V star-delta I _e A 25.5				
Rated operational current motor load switch 230 V I _e A 23.7 230 V star-delta I _e A 32 400 V 415 V I _e A 23.7 400 V star-delta I _e A 32 500 V I _e A 23.7 500 V star-delta I _e A 32 690 V I _e A 14.7 690 V star-delta I _e A 25.5				
230 V I _e A 23.7 230 V star-delta I _e A 32 400 V 415 V I _e A 23.7 400 V star-delta I _e A 32 500 V I _e A 23.7 500 V star-delta I _e A 32 690 V I _e A 14.7 690 V star-delta I _e A 25.5	22	KVV	-	
230 V star-delta I _e A 32 400V 415 V I _e A 32 400 V star-delta I _e A 32 500 V I _e A 23.7 500 V star-delta I _e A 32 690 V I _e A 25.5	22.7	۸		
400V 415 V				
400 V star-delta				
500 V		Α	l _e	
500 V star-delta	32	Α	l _e	400 V star-delta
690 V	23.7	Α	l _e	500 V
690 V star-delta I _e A 25.5	32	Α	l _e	500 V star-delta
	14.7	Α	l _e	690 V
	25.5	Α	I _e	690 V star-delta
				AC-21A
Rated operational current switch				
440 V I _e A 32	32	Α	I _e	
AC-23A			-	
Motor rating AC-23A, 50 - 60 Hz P kW		kW	Р	
230 V P kW 7.5	7.5			
400 V 415 V P kW 15				
500 V P kW 15				
690 V P kW 15				
Rated operational current motor load switch				
	37	Δ	L	
400 V 415 V I _e A 32				
500 V I _e A 26.4		Α	l _e	
690 V I _e A 17	17	Α	l _e	690 V
DC C				DC

DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l _e	Α	25
Voltage per contact pair in series		V	60
DC-21A	l _e	Α	
Rated operational current	l _e	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	1
48 V			
Rated operational current	Ie	Α	25
Contacts		Quantity	2
60 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	3
120 V			
Rated operational current	I _e	Α	12
Contacts		Quantity	3
240 V			
Rated operational current	l _e	Α	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	Ie	Α	20
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 (1 - 6) 2 x (1 - 6)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.75 - 4) 2 x (0.75 - 4)
Terminal screw			M4
Tightening torque for terminal screw		Nm	1.6
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity			M.
Terminal screw			M4

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
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 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) / Off-load switch (EC001105)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Changeover switch (ecl@ss10.0.1-27-37-14-05 [AKF062013])

Model			Dahlander switch
Number of poles			3
With 0 (off) position			Yes
With retraction in 0-position			No
Rated permanent current lu	А		32
Rated operation current le at AC-3, 400 V	А		23.7
Rated operation power at AC-3, 400 V	kV	W	12
Degree of protection (IP), front side			IP65
Degree of protection (NEMA), front side			Other
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as change-over contact			0
Suitable for ground mounting			Yes
Suitable for front mounting 4-hole			No
Suitable for distribution board installation			No
Suitable for intermediate mounting			Yes
Complete device in housing			No
Material housing			Plastic
Type of control element			Other
Type of electrical connection of main circuit			Screw connection

Assets (links)

Declaration of CE Conformity 00003074

Instruction Leaflets

IL03801006Z2018_04

Additional product information (links)

IL03801006Z (AWA1150-1686) Cam switches: service distribution board

IL03801006Z (AWA1150-1686) Cam switches: service distribution board

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801006Z2018_04.pdf

Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=53
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/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