### **DATASHEET - T3-2-8515/EZ**



Universal control switches, T3, 32 A, centre mounting, 2 contact unit(s), Contacts: 4, 45  $^{\circ}$ , momentary, With spring-return from both directions to OFF, AUSL>Aus<EIN, design no. 8515





T3-2-8515/EZ Part no. Catalog No. 018528

Delivery program			
Product range			Control switches
Part group reference			Т3
Basic function			Universal control switches
			with black thumb grip and front plate
Contacts			4
Degree of Protection			Front IP65
Design			centre mounting
Contact sequence			1 °
Switching angle		o	45
Switching performance			momentary With spring-return from both directions to OFF
Design number			8515
Front plate no.			AUSL AUS EIN FS 141142
front plate			AUSL>Aus <ein< td=""></ein<>
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	15
Rated uninterrupted current	Iu	Α	32
Note on rated uninterrupted current !u	ū		Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	

# **Technical data**

delleral	
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			
Ambient temperature  Open		°C	-25 - +50
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree		U	III/3
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Mechanical shock resistance	Оппр	g	15
Mounting position		y	As required
Contacts			As required
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	Iu	Α	32
Note on rated uninterrupted current !u			Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I <sub>e</sub>	2
AB 40 % DF		x I <sub>e</sub>	1.6
AB 60 % DF		x I <sub>e</sub>	1.3
Short-circuit rating			
Fuse		A gG/gL	35
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	650
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	1
Switching capacity			
$\cos \phi$ rated making capacity as per IEC 60947-3		Α	320
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	260
400/415 V		Α	260
500 V		Α	240
690 V		Α	170
Safe isolation to EN 61140		V AC	AAO
between the contacts  Current heat loss per contact at I <sub>e</sub>		V AC W	1.1
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	1.1
Lifespan, mechanical	Operations		> 0.5
, .	Operations	x 10 <sup>6</sup>	
Maximum operating frequency	Operations/h		1200
AC AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	P	kW	5.5
230 V Star-delta	P	kW	7.5
400 V 415 V	Р	kW	11
400 V Star-delta	Р	kW	15
500 V	Р	kW	15
500 V Star-delta	Р	kW	18.5
690 V	Р	kW	11
690 V Star-delta	Р	kW	22
Rated operational current motor load switch			
230 V	l <sub>e</sub>	Α	23.7
230 V star-delta	I <sub>e</sub>	Α	32
400V 415 V	I <sub>e</sub>	Α	23.7
400 V star-delta	l <sub>e</sub>	Α	32
500 V	l <sub>e</sub>	Α	23.7
500 V star-delta	I <sub>e</sub>	Α	32
690 V	I <sub>e</sub>	Α	14.7
690 V star-delta	I <sub>e</sub>	Α	25.5

D	ν\/	
		7.5
		15
		15
		15
r	KVV	13
	۸	32
		32
		26.4
l <sub>e</sub>	Α	17
l <sub>e</sub>	Α	25
	V	60
I <sub>e</sub>	Α	
I <sub>e</sub>	Α	1
	Quantity	1
I <sub>e</sub>	Α	25
	Quantity	1
I <sub>e</sub>	Α	25
	Quantity	2
l <sub>e</sub>	Α	25
	Quantity	3
l <sub>e</sub>	A	12
	Quantity	3
ام	Α	5
6		
	Quantity	
1	Δ	20
·e		24
Foult		
probability	H	< 10 <sup>-5</sup> ,< 1 failure in 100,000 switching operations
	$mm^2$	1 x (1 - 6) 2 x (1 - 6)
	mm <sup>2</sup>	1 x (0.75 - 4)
	ııım-	2 x (0.75 - 4)
		M4
	Nm	1.6
		Fair and the second sec
		B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
U <sub>e</sub>	V AC	600
	Α	25
	Ie Ie Ie Ie Ie Ie Fault probability	P kW P kW P kW C

Pilot Duty		A 600
Switching capacity		
Maximum motor rating		
Single-phase		
120 V AC	HP	1.5
200 V AC	HP	3
240 V AC	HP	3
Three-phase		
200 V AC	HP	3
240 V AC	HP	3
480 V AC	HP	7.5
600 V AC	HP	10
Short Circuit Current Rating	SCCR	
Basic Rating	kA	5
max. Fuse	А	40
High fault rating	kA	10
max. Fuse	Α	40, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	14 - 10
Terminal screw		M4
Tightening torque	lb-in	17.7

# Design verification as per IEC/EN 61439

200.g.: 1010uo uo po: 120,211 01 100			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.1
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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) / Control switch (EC002611)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Control switch (ecl@ss10.0.1-27-37-14-14 [ACN998011])

[ACM998011])		
Type of switch		
Number of poles		1
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	32
Number of switch positions		3
With 0 (off) position		No
With retraction in 0-position		No
Device construction		Built-in device
Width in number of modular spacings		0
Suitable for ground mounting		No
Suitable for front mounting 4-hole		Yes
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Complete device in housing		No
Type of control element		Toggle
Front shield size		48x48 mm
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		12

## **Approvals**

Product Standards	UL 60947-4-1;CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE 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
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

### **Dimensions**

