



# **MODULAR REMOTE CONTROL UNITS**





Larsen & Toubro Limited is India's leading engineering company. The Electrical Business Group offers the countries widest range of low tension switchgear. In addition to high quality products from it's own factories. L&T seeks out the best in Power Control Technology and offers these products in the Indian Market. Push Button Actuators, Selector Actuators, LED Indication, Modular / Integral Indicators & Push Button Stations from ESBEE are part of the world class products offered byLarsen &Toubro Limited.

The Electrical Business Group of Larsen & Toubro Limited manufactures and markets a wide range of L. T. Switchgear & Accessories all over the country. L&T's marketing efforts are complimented by a strong service capability that extends nationwide. A network of more than 450 stockists in addition to L&T's own offices ensures that wherever you are in the country, ESBEE products are not far from you.





#### **Esbee Industrial Combines,**

manufactures wide range of 22.5mm Push Button Switches and Pilot Lights (RemoteControl Signaling Units) and Appliance Switches for which there is technical collaboration with EMB Corporation, USA.

The Company has **ISO 9001 : 2000** certified quality system.

A strong believer in Indian product quality, ESBEE exports to developed countries like USA, Canada, Germany etc.

ESBEE products have approvals from International testing agencies like VDE (Germany), UL (USA), CSA (Canada) etc.



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### **GENERAL TERMS**

### For Inside Maharashtra:

 Prices are F.O.R. Pune and are inclusive of excise duty, but exclusive of Tax, Freight, Octroi, Levies and Duties.

### For Outside Maharashtra:

 Prices are F.O.R. Pune and are inclusive of excise duty, Central Sales Tax but exclusive of any other Taxes, Freight, Octroi

# TEEKAY series

## MODULAR REMOTE CONTROL UNITS (22.5 mm) & LED INDICATORS



### **Features of Remote Control Units**

Actuators / Indicators with new design optimally meets end user requirement Can accommodate 1 NO Block OR 1 NC Block OR 1 Bulb Holder
Designed for flexibility to change from 1 Block first row clip to 3 Block first row clip
Screw less assembly
Ease in mounting and wiring
Good Aesthetics
International approvals CE, CSA, UL, VDE, `S` MARK for contact blocks and CE, CSA, UL, VDE for bulb holders

### **Features of LEDs**

- New sleek and compact design
- Lug wiring possible
- Uniform bright illumination
- Wide voltage range
- Operating life more than 1,00,000 hours,
- Can be assembled in push button stations
- IP30 protection with shroud

### **Features of Modular block**

- Snap fit for ease in assembly
- Finger proof shrouded terminals
- NO and NC block are colour coded for easy identification
- Captive screw and self lifting washer for easy insertion

### **Technical Specifications of LED Indicators**

Type of LED	TT TS				
RATED VOLTAGE	6 V AC / DC, 12 V AC / DC, 24 V AC / DC, 48 V AC / DC 110 V AC, 110V DC, 240 V AC, 220 V DC				
OPERATING VOLTAGE	-20% TO +10% OF RATED VOLTAGE				
POWER CONSUMPTION					
-24V / 110V / 240V	< 0.6W				
INSULATION RESISTANCE	100 M Ù AT 500 V DC				
DIELECTRIC STRENGTH	1.5 KV AC				
OPERATING TEMP.	-10 <sup>o</sup> C TO 55 <sup>o</sup> C				
STORAGE TEMP.	-25 <sup>o</sup> C TO 70 <sup>o</sup> C				
INDICATOR COLOURS	RED, GREEN, YELLOW, BLUE, OR	ANGE, WHITE			
PANEL CUT-OUT REQUIRED	22.5 mm, 30 mm with adapter ring	1			
OVERALL DIMENSION	29 X 56 mm (Approximately)	29 X 60 mm (Approximately)			
WEIGHT	25 Grams.				
DEGREE OF PROTECTION	IP 30 - (FOR TERMINALS)				
	IP 65 - (TOP SURFACE OF INDICAT	ORS)			
LIFE	1,00,000 (BURNING HRS.)				

## **LED INDICATOR & FILAMENT INDICATOR**

Туре	Description	Cat. No.	Colour (4 <sup>th</sup> Digit)	Voltage (5 <sup>th</sup> & 6 <sup>th</sup> Digit)
New	LED Indicator	тто 🗆 🗆	1 2 4 5 6 7	X1 - 240V AC X2 - 220V DC W1 - 110V AC W2 - 110V DC Q1 - 63.5V AC / DC
	LED Indicator	TS0□□□	1 2 4 5 6 7	V1 - 48V AC / DC U1 - 24V AC / DC T1 - 12V AC / DC S1 - 6V AC / DC
	LED Indicator	TS0□□□	1 2 4 5 6 7	Y1 - 415V AC
	Compact Integral Indicator	TL0□□1	1 2 4 5 6 7 8	W1 - 110V AC / DC V1 - 48V AC / DC U1 - 24V AC / DC T1 - 12V AC / DC S1 - 6V AC / DC
1	Compact Integral Indicator with Resister & Diode	TM0□X1	1 2 4 5 6 7 8	X1 - 240V AC
	Indicator with Filament bulb	TB0 □ □ 1	1 2 4 5 6 7 8	R1 - 6V - 110V AC/DC X1 - 240V AC W1 - 110V AC / DC V1 - 48V AC / DC U1 - 24 V AC / DC T1 - 12 V AC / DC S1 - 6 V AC / DC
500	Universal Voltage LED Indicator	TP0□Z1 TP0□Z2	<ul><li>2 4</li><li>6 7</li></ul>	Z1 - 40V to 240V AC/DC Z2 - 24V to 240V AC/DC

Note: Colours available - 1 - Red, 2 - Green, 3 - Black, 4 - Yellow, 5 - White / Opal, 6 - Blue, 7 - Orange, 8 - Colourless

## **MODULAR REMOTE CONTROL UNITS**

Туре	Description	Cat. No.	Colour (4 <sup>th</sup> Digit)	Voltage (5 <sup>th</sup> Digit)
	Flush head Push Button with 1 NC Block	TD11B2	•	
	Flush head Push Button with 1 NO Block	TD1□A2	2 <b>3 4 5 6 7</b>	
	Projecting head Push Button with 1NC Block	TD41B2	•	
	Projecting head Push Button with 1NO Block	TD4□A2	2 3 4 5 6 7	
922	Symmetrical head 2 position selector switch (NSR) with 1 NC Block	TK63B2	3	
0.28	Symmetrical head 2 position selector switch (NSR) with1 NO Block	TK63A2	3	
	Symmetrical head 2 position selector switch (SR) with1 NC Block	TI63B2	3	
0.25	Symmetrical head 2 position selector switch (SR) with1 NO Block	TI63A2	3	
	Push Button Station with Push Pull Emergency Switch, Red with 1 NC	TJ51B2	1	
Ø 40	Mushrum Head Push Turn Actuator with 1 NO or NC Block	TH5□B2 TH5□A2	1 2 3 4	B2 for NC A2 for NO

Note: Colours available - 1 - Red, 2 - Green, 3 - Black, 4 - Yellow, 5 - White / Opal, 6 - Blue, 7 - Orange, 8 - Colourless

# H series

### EB1

### **PUSH BUTTON ACTUATORS Ø 22.5 mm**

© 29	Description	Cat. No.	Cours Available 6 <sup>th</sup> Digit in Cat. No.
3	Flush Head Non Illuminated	HD15C□	1234567
	Flush Head Illuminated	HD16C□	1 2 4 5 6 7 8
8 0 29	Projecting Head 'Push Function' Non Illuminated	HD45C□	1234567
	Illuminated Projecting Head 'Push Function'	HD46C□	1245678
	Projecting Head 'Push -Push Function' Non (Illuminated)	HF45C□	1234567
*	Projecting Head 'Push- Push Function' Illuminated	HF46C□	1245678
0.40	Mushroom Head Ø 40 mm 'Push Function' Non Illuminated	HD55C□	1234
\$ 0.40 \$ 8	Mushroom Head 'Push Turn' Non Illuminated	НН55С□	1234
	Mushroom Head With Lock & Key Non Illuminated	HQ55C□	1 2 3 4
	Mushroom Head 'Push Pull' Non Illuminated	HG55B □	1234
44.5 x 29.6	Twin Touch Non Illuminated	HD15GO	
54 x 30	Twin Touch Non Illuminated	HD15G3	3
VIIII VIIIII	Twin Touch With Pilot Lamp Illuminated	HD16G□	4 7 8 (Colour of Center Indication Strip)

- Note: 1. Actuators & Selector Actuators with black ABS collar are offered as Standard Eg.: HD15C1
  - 2. Actuators (except Mushroom Head Push Pull & all types of twin touch Actuators) are also available with chrome plated ABS & Brass collar
  - For Chrome plated ABS Collar replace 5 th digit C by A Eg.: HD15A1
  - For Brass Chrome plated ABS Collar replace C by B Eg.: HD15B1
  - 3. For Non-Illuminated Actuator / Selector Actuator at least 1 NO or NC Block required to make a complete Assembly eg. HD15C1 + HC61A2 makes complete assembly of flush head actuator with 1 NO Block
  - 4. For Illuminated Actuator / Selector Actuator at least 1 Bulb Holder required to make a complete Assembly NO or NC Blocks can be added as per the scheme required.
  - 5. Colours available 1 Red, 2 Green, 3 Black, 4 Yellow, 5 White/Opal, 6 Blue, 7 Orange, 8 Colourless

Туре	Description	Cat. No.	Colour (6 <sup>th</sup> Digit)	Voltage (7 <sup>th</sup> & 8 <sup>th</sup> Digit)
New	Flush Head	HD19C□□□	<b>1 2 4 7</b>	T1 - 12 VAC / DC U1 - 24 VAC / DC V1 - 48 VAC / DC W1 - 110 VAC X1 - 240 VAC
New	Projecting Head (Push Function)	HD49C□□□	6	T1 - 12 VAC / DC U1 - 24 VAC / DC V1 - 48 VAC / DC W1 - 110 VAC X1 - 240 VAC
New	Projecting Head (Push - Push Function)	HF49C □□□	6	T1 - 12 VAC / DC U1 - 24 VAC / DC V1 - 48 VAC / DC W1 - 110 VAC X1 - 240 VAC
New	Twin Touch	HD19G□□□	4 7	T1 - 12 VAC / DC U1 - 24VAC / DC V1 - 48 VAC / DC W1 - 110 VAC X1 - 240 VAC

#### EB3 **SELECTOR ACTUATOR WITH LED** 12 Colour (6<sup>th</sup> Digit) Voltage (7<sup>th</sup> & 8<sup>th</sup> Digit) T1, U1, V1, W1, X1 **2 POSITION 3 POSITION** Spring Return from R. H. Non Spring Non Spring Spring Return Spring Return Spring Return Return Return From L. H. HK69C□□□ HI69C□□□ HL69C□□□ | HJ69C□□□ HM69C□□□ HN69C□□□

Note \* - In 2 position selector actuator, for operating style  $\ ^{^{1}}$  replace 2nd digit from K to R and for operating style  $\ ^{^{0}}$  replace 2nd digit from K to T

EB5

### **SELECTOR ACTUATORS**

POSITION		SITION		3 PO	SITION	
	Non Spring Return	Spring Return	Non Spring Return	Spring Return	Spring Return From L. H.	Spring Return from R. H.
Type of Selector Actuator	*	0	0 2	1 2	1 0	1 2
Ø 29		Syr	nmetric Head	(Non Illumina	ited)	
	HK65C□	HI65C□	HL65C□	HJ65C□	HM65C□	HN65C□
and the	Colours Available (6 <sup>th</sup> Digit in Cat. No.) 1235					
Ø 29 →		S	ymmetric Hea	ad (Illuminate	d)	
15. E.	HK66C□	HI66C□	HL66C□	HJ66C□	НМ66С□	HN66C□
	Colours Available (6 <sup>th</sup> Digit in Cat. No.) 1 2 5 8					
28		L	ever Head (N	on Illuminated	d)	
27.5	HK75C□	HI75C□	HL75C□	HJ75C□	НМ75С□	HN75C□
	Colours Av	ailable (6 <sup>th</sup> Dig	it in Cat. No.)	135	1	
Ø 29		Lock &	Key Rotary T	ype (Non Illun	ninated)	
	HK85C3	HI85C3	HL85C3	HJ85C3	HM85C3	HN85C3
	Colour Ava	ilable 3				
	o Head Illuminated)	HP95C□	\$ 029		ock & Key Push Turn)	HH85C3
Colours Available (6th Digit in Cat	. No.) 1 2	3 5 C	olour Availab	le <b>3</b>		

Note \* - In 2 position selector actuator, for operating style "\sqrt{ replace 2nd digit from K to R and for operating style  $\mathring{\underline{\ \ \ \ }}$  replace 2nd digit from K to T

### **ACCESSORIES FOR ACTUATORS & SELECTOR ACTUATORS**

MODULAR CONTACT BLOCK						
22 2	Description	Cat. No.	Sep. 28	Description	Cat. No.	
Tillet -	'NO' BLOCK	HC61A2	Heat .	BULB HOLDER WITH BUILT IN	HC61X1	
	'NC' BLOCK	HC61B2	Less (g)	RESISTOR & DIODE (240 V AC)	ПСОТАТ	

Note: For Non-Illuminated Actuators / Selector Actuators at least 1 NO or NC Block is required for electrical connection. For Illuminated Actuators / Selector Actuators at least 1 Bulb Holder is required for electrical connection.



Note: First Row Clip is Included in the Actuators and Selector Actuators Assembly.

	MODULAR INDICATORS						
	Description	Cat. No.	Colours Available 6 <sup>th</sup> Digit in Cat. No.				
Ø29 Ø29	Ribbed Lens (Without Trim Collar) (Standard)	HB07F□	1 2 4 (5) 6 7 8				
	Ribbed Lens (With Trim Collar)	НВ07Е□	4 3 6 7 8				

EC SPARES

EC1 SPARE LENS	C1 SPARE LENS FOR MODULAR/ INTEGRAL INDICATORS (RIBBED LENS)						
Ribbed Lens	Colour	WITHOUT TRIM COLLAR	WITH TRIM COLLAR				
Nibbed Lens	Colour	Cat. No.	Cat. No.				
	Red	HE103108	HE903108				
	Green	HE104109	HE904109				
	Yellow	HE105110	HE905110				
	Opal	HE101111	HE901111				
	Blue	HE107112	HE907112				
	Orange	HE108113	HE908113				
	Colourless	HE100101	HE900101				

EC2 MODULAR BLOCKS (BULB HOLDERS WITH SERIES RESISTOR)							
	Bulb Rating	6V,2W	12V,2W	24V,2W	48	3V,2W	130V,20mA
	Supply Voltage	6V AC/DC	12V AC/DC	24V AC/DC	48V	AC/DC	110V AC/DC
	Cat. No.	HC61S1	HC61T1	HC61U1	HC61V1		HC61W1
BULB HOLDER WITH BUILT IN RESISTOR & DIODE		DIODE	BULB HOL	DER WITHO	UT F	RESIST	OR / DIODE
Bulb Rating	130V, 20m	A BULB	Supply Voltage 6V / 1		6V / 12	V / 24V / 48V	
Supply Voltage	240V AC S	SUPPLY	(Please specify while ordering) 110V		/ AC / DC		
Cat. No.	HC61X1		Cat. No.			HC61R	1

EC SPARES

EC3	FILAMENT LAMPS (BA 9S TYPE)					
		Cat. No.	Voltages			
	1	HC550001	6V AC / DC			
	-	HC550002	12V AC / DC			
		HC550003	24V AC / DC			
		HC550004	48V AC / DC			
		HC550005	130V AC / DC			

EC4.	FIXING DEVICE	
		Cat. No.
		HH192000

EC5.	LAMP EXTRACTOR	
		Cat. No.
HH157000		

EC6	SPARI	E LENS CAP	
		NON ILLUMINATED	ILLUMINATED
	Colour	Cat. No.	Cat. No.
	Red	HB103002	HB103103
	Green	HB104000	HB104101
	Black	HB102006	NA
	Yellow	HB105008	HB105109
	White/Opal	HB101004	HB101105
	Blue	HB107010	HB107111
	Orange	HB108012	HB108113
	Colourless	NA	HB100107

EC7	SHROUD FOR ACTUATOR		
	Colour	Cat. No.	
	Red	HH152002	
	Green	HH153003	
	Black	HH154004	
	Yellow	HH155005	
	Colourless	HH150100	

EC8 COLLAR (For Flush/Projecting Head)			
	Colour	Cat. No.	
	Black Chrome Plated	HB192000	
	- 'ABS'	HB196000	
	- 'BRASS'	HB326000	

EC9	ADAPTOR RING (For 30 to 22mm in Panel Cutout conversion)		
	Colour	Cat. No.	
00	Gray	HH180000	
	Black Chrome Plated :	HH182004	
	- 'ABS'	HH196006	

EC10	BLANKING PLUGS		
	Colour	Cat. No.	
	Gray	HH180002	
	Black	HH182009	
	Chrome Plated 'ABS'	HH196010	

EC11	CENTER INDICATION STRIP (for Twin Touch Actuator)	
	Colour	Cat. No.
	Black	HB102058
	Yellow	HB105163
	Orange	HB108169
	Colourless	HB100161

# **PUSH BUTTON STATIONS (in grey ABS)**

Туре	Function	Cat. No.	Туре	Function	Cat. No.
	Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC'	JAA10000		Mushroom Head Actuator with Lock & Key	JAG10000
	Flush Head Actuator - Green with Legend - START Contact - 1 'NO'	JAB20000	0	and Legend - STOP Contact - 1 'NC' for Stop	
	Illuminated Actuator - Red with Legend - OFF Contact - 1 'NC' Bulb Holder with Bulb 240V AC	Flush Head Actuator - Green with Legend - START Contact - 1 'NO' (Station One)	JBB2A100		
	Illuminated Actuator - Green with Legend - ON Contact - 1 'NO' Bulb Holder with Bulb 240V AC	JAD60000		Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Two)	
	T . B	141100000		Pilot Light 240V AC Colourless Lens (Station One)	JCZ4B2A1
	Two Position Symmetric Head Selector Switch - Black with Legend - OFF / ON Contact - 1 'NO'	JAH20000		Flush Head Actuator - Green with Legend - START Contact - 1 'NO' (Station Two)	
	Contact - 1 NO			Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Three)	
		JAI20000	JAI20000	Flush Head Actuator - Green with Legend - FORWARD Contact - 1 'NO' (Station One)	JDB2A1B2
	Two Position Lock & Key Rotary Switch with Legend - OFF / ON Contact - 1 'NO'			Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Two)	
				Flush Head Actuator - Green with Legend - REVERSE Contact - 1 'NO' (Station Three)	
			1 1	Flush Head Actuator - Green with Legend - UP Contact - 1 'NO' (Station One)	JEB2A1B2
	Mushroom Head Actuator 'Push Function' with Legend - STOP Contact - 1 'NC' for Stop	JAE10000		Flush Head Actuator - Red with Legend - STOP Contact - 1 'NC' (Station Two)	
				Flush Head Actuator - Green with Legend - DOWN Contact - 1 'NO' (Station Three)	
	Mushroom Head Actuator 'Push Turn Type'	JAF10000		Flush Head Actuator - Green with Legend - START Contact - 1 'NO' (Station One)	JBB2F100
	with Legend - STOP Contact - 1 'NC' for Stop			Mushroom Head Actuator 'Push Turn Type' with Legend - STOP Contact - 1 'NC' (Station Two)	

Туре	Description	Cat. No./ Price
( A)	All Gray Without hole	HF999000
	All Gray & 1 hole of 22.5	HF999001
•	All Gray & 2 holes of 22.5	HF999002

Туре	Description	Cat. No./ Price
	All Gray single hole	HF999004
	All Gray & 2 hole of 22.5	HF999005
	All Gray & 3 holes of 22.5	HF999003
	Single hole yellow cover & Gray Base	HF995001

### ED4 SPARE CONTACT BLOCK (for Push Button Stations)

for Push Button Stations		1NO + 1NC			
	'NO' Contact Block	'NC' Contact Block		1'NO' + 1'NC' Contact Block	
	HC42A2	HC42B2	HC42		2C2
Bulb Holder with Bulb 240V AC+Contact Block		with 2	'NO' or 2'NC'		
A.,	'NO' Contact Block	'NC' Contact Block		2'NO' Contact Block	2'NC' Contact Block
	HC22N1	HC22O1		HC42D2	HC42E2

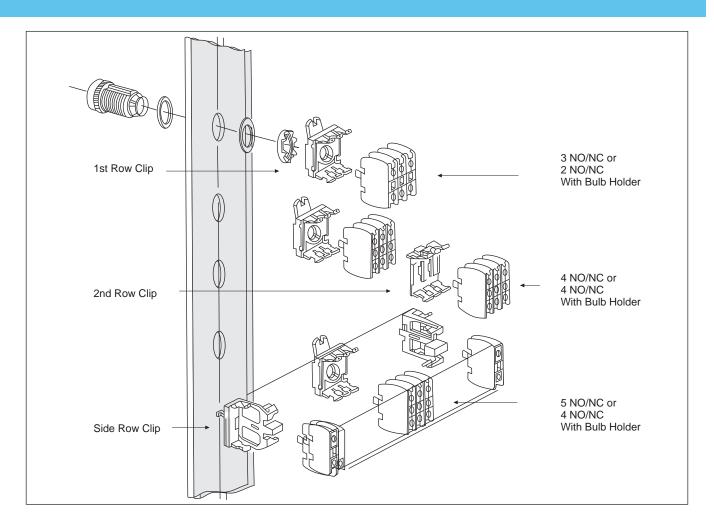
### ED5 METAL PLATES - SPARE

DFF CM	Description		Cat. No.			
		Small	Large	Square		
Small	OFF - ON	HH242001	HH242016	HH242031		
Large	FORW OFF-REV.	HH242002	HH242017	HH242032		
	HAND - OFF - AUTO	HH242003	HH242018	HH242033		
	STOP - START	HH242004	HH242019	HH242034		
	FAST - OFF - SLOW	HH242005	HH242020	HH242035		
	O - I	HH242006	HH242021	HH242036		
	I - O - II	HH242007	HH242022	HH242037		

# **TECHNICAL SPECIFICATIONS**

### EF1

### **EXPLODED VIEW OF MODULAR BLOCK ASSEMBLIES**



### EF2 TECHNICAL SPECIFICATIONS (Push Button Stations & all Purpose Enclosures)

### Degree of Protection :

Ingress Protection IP65 for Push Button Station with Indicators / Non Illuminated Push Function Actuators & all Purpose Enclosure

Fully insulated to house electrical and electronic equipment with respect to protection against electrical shock

### Materials :

Base : Tough, impact resistant, ABS Cover : Tough, impact resistant, ABS

Cover Screws : Slotted head, metal screws for Push Button

Stations and tough, low friction PA6 captive cross slot head screws for all purpose

enclosures

Gasket : Oil and acid resistant nitrile rubber

### Terminal Capacity:

1 to 2.5 mm square flexible wire

### Mounting:

Directly through base, in cover screw cavity, outside gasketted area with No.4 size, sheet metal screws

### Machining:

Machining is easy with normal tools. Enclosures can be drilled, sawed, filed, punched etc. They can be welded with ultrasonic equipment

### Dimensions:

	1	2	3	All Purpose	
	Station	Station	Station	Enclosure	
Base size mm	74 x 70	107 x 70	140 x 70	110 x 80	
Cover Depth mm	16.50	16.50	16.50	20.00	
Base Depth mm	32.00	30.00	32.00	45.00	

### Maintenance:

Do not need any particular maintenance. If necessary, soap and water can be used for cleaning. If detergent is used, enclosure should be rinsed well with clean water. **Do not use any solvents to clean the enclosures** 

### Chemical resistance:

ABS products are almost completely resistant to aqueous acids, alkalis and salts. Concentrated phosphoric and hydrochloric acids have little effect. Low KB solvents, alcohols and animal / vegetable / mineral oils produce insignificant changes. Aromatic or chlorinated hydrocarbons and high KB solvents cause marked swelling. Esters Ketones and Unsaturated alkalis are solvents for ABS and should not be used.

#### Chemical resistance:

Long term exposure to temperatures above 70°C should be avoided. No significant change in impact strength is noticed up to -20°C.

## ACTUATOR, INDICATORS, MODULAR & FRONT CONNECTION BLOCKS

VDE, CE Electrical Ratings (IEC 947-3, 947-5-1, VDE 0660 Part 200, EN 60947-3, EN 60947-5-1)									
Alternating Current	Rated Operational Voltage (50-60 Hz)		V	110	230	440	500		
	Rated Operational Current (IEC 947-3)	AC21	Amp	16	14.0	11.0	10.0		
	Rated Operational Current (IEC 947-5-1)	AC15	Amp	8	6.0	3.0	2.0		
Direct Current	Rated Operational Voltage		V	24	48	110	220		
	Rated Operational Current (IEC 947-5-1)	DC13	Amp	1.5	1.0	0.3	0.2		

UL, CSA Electrical Ratings (CAN/CSA-C22.2 NO 14-M91, UL 508)											
Contact Rating	Thermal Continuous		Maximum Current					Maximur	n VA		
Code Designation,	Test Current,	120	120 V 240 V 480 V 600 V				0 V				
AC	Amp	Make	Break	Make	Break	Make	Break	Make	Break	Make	Break
A 600	10	60	6.0	30	3.0	15	1.50	12	1.20	7200	720
Contact Rating Code	Thermal Continuous		Maximum Make & Break Current, Amp Ma					ximum Make	& Break		
Designation, DC	Test Current, Amp	125 V				250 V			at 300 V or less, VA		
P 300	5.0	1.1				0.55				138	

P 300	5.0	1.1		0.55		138		
Electrical Life at 230 V, 50-60Hz, AC, utilisation category AC21 to IEC 947-3		Rated	Rated Thermal Current		mp with, 2.5mm² flexible ductor			
	Rated current Amps	Operations (x10 <sup>6</sup> )	Mechanical Life		1 x 10 <sup>6</sup> operations			
	6 2	0.5 1	Termin	nals		able for flexible or solid ductors from 2 x 1 mm <sup>2</sup>		
Degree of Protection IP 65 IP67 with rubber / vinyl shroud			Disposition of Contacts for Modular Blocks					
Operational Tempe	Operational Temperature Limits (without shroud)		] $\square$	Contact Open	NC			
	Non-illuminated -30 to + 60°C	Illuminated -30 to + 40 <sup>o</sup> C		Contact Close	NO			
Rated Insulation V	oltage	600 V AC.				0 1 2 3 4 4.8		
Dielectric / H. V. Test Voltage at 2.5 KVAC FOR 60. Sec.					Stroke (mm)			