

Specification of panels of single hoist 5 Ton EOT Crane

1	Requirement					
1.1	Supply of Complete set of panels with necessary contactors, relays, timers, etc with complete internal wiring as per drawing no. 3WEEOT01149 for 4 nos 5 ton capacity EOT Crane. 1 Lot of panel shall contain the set of panels for 1 EOT crane stated in serial no. 2, comprising of Protective panel, Main hoist panel and LT & CT panel					
2	Panels Size: 3 nos panel having following sizes shall be used for whole panel manufacturing					
2.1	Panel for Protective circuit as per sheet 1 & 2 of Drawings and material as per clause no. 3.1	Size 600 X 600 X 250 ±5%	1 No.	Vender to confirm		
2.2	Panel for Hoist as per Sheet 3 & 4 of drawings and material as per clause no. 3.2	Size 1000 X 800 X 300 ±5%	1 No.	Vender to confirm		
2.3	Panel for Long travel motion and cross travel motion as per sheet 5, 6, 7 & 8 of Drawings and material as per clause no. 3.3 & 3.4	Size 1000 X 800 X 300 ±5%	1 No.	Vender to confirm		
3	The details of the item to be supplied for each EOT Crane of 5 ton capacity are as follows					
S No.	Description	Rating	Quantity	Confirm/Specify	Offered	Remarks
3.1	Protective Panel					
3.1.1	Control transformer (C TF)	415/110V, 1 KVA, Copper wound	1 No.	Vender to confirm		
3.1.2	Control transformer (LTF)	415/220V, 1 KVA, Copper wound	1 No.	Vender to confirm		
3.1.3	Main Contactor (MC)	70A, 110V Model No. 3TF47	1 No.	Vender to confirm		
3.1.4	HRC Fuse with mounting base (FSU)	100A	3 Nos.	Vender to confirm		
3.1.5	MCB (2 pole) (CS1 & CS2)	6A	2 Nos.	Vender to confirm		
3.1.6	Control Contactor (LC, BC, d1, d2, d3)	9A, 110V Model No. 3TF30	5 Nos.	Vender to confirm		
3.1.7	CST terminal & CST channel		1 set	Vender to confirm		
3.1.8	PVC channel for wiring		1 set	Vender to confirm		
3.1.9	Power wiring (Single core multistrand PVC insulated flexible copper wire)	6 Sq.mm (R, Y, B)	1 set	Vender to confirm		
3.1.10	Control wiring (Single core multistrand PVC insulated flexible copper wire)	1.5 Sq.mm single core	1 set	Vender to confirm		
3.1.11	Indication lamp LED Type (RYB)		1 set	Vender to confirm		
3.1.12	Selector Switch	3 Step (RRC, Pendent and Cabin)	1 no.	Vender to confirm		

3.1.13	Rotary switch double pole	16 Amp	2 Nos.	Vender to confirm		
3.1.14	HRC fuse with mounting base	2A	3 Nos.	Vender to confirm		
3.2 Main Hoist Panel						
3.2.1	MPCB (3 pole), Auto reset	32-45 A	1No.	Vender to confirm		
3.2.2	MH Contactor (MH-ML)	63A, 110V Model No. 3TF47	2Nos.	Vender to confirm		
3.2.3	Resistance contactor (1C, 11, 22, 33 44)	32A, 110V Model No. 3TF44	4Nos.	Vender to confirm		
3.2.4	Electronics timer (1T1, 2, 3, 4)	0-30sec. , 110V, ON Delay	4Nos.	Vender to confirm		
3.2.5	M/H Creep contactor	16A, 110 V Model No. 3TF32	2Nos.	Vender to confirm		
3.2.6	O/L Relay (OL1)	12 to 20A	1No.	Vender to confirm		
3.2.7	Aux. contactor for RRC interface & control	9A, 110V Model No. 3TF30	5Nos.	Vender to confirm		
3.2.8	CST Channel & CST		1 set	Vender to confirm		
3.2.9	PVC channel for wiring		1 set	Vender to confirm		
3.2.10	Power wiring (Single core multistrand PVC insulated flexible copper wire)	6 Sq.mm (R, Y, B)	1 set	Vender to confirm		
3.2.11	Control wiring (Single core multistrand PVC insulated flexible copper wire)	1.5 Sq.mm single core	1 set	Vender to confirm		
3.2.12	Creep Transformer	1 KVA, Step Up 230V/415V, Copper wound	1 set	Vender to confirm		
3.3 Long Travel (LT) Panel						
3.3.1	MPCB (3 pole), Auto reset	32-45A	1No.	Vender to confirm		
3.3.2	LT contactor (F&R)	32A, 110V Model No. 3TF44	2Nos.	Vender to confirm		
3.3.3	LT Resistance contactor (3C&4C)	32A, 110V Model No. 3TF44	8Nos.	Vender to confirm		
3.3.4	O/L Relay (O/L 3&4)	6-12.5A	2Nos.	Vender to confirm		
3.3.5	Electronics timer (3T1,2,3,4)	0-30 sec. , 110V, On Delay	4Nos.	Vender to confirm		
3.3.6	Power wiring (Single core multistrand PVC insulated flexible copper wire)	6 Sq.mm (R, Y, B)	1 set	Vender to confirm		
3.3.7	Control wiring(Single core multistrand PVC insulated flexible copper wire)	1.5 Sq.mm	1 set	Vender to confirm		
3.3.8	Aux. contactor	9A, 110V Model No. 3TF30	5Nos.	Vender to confirm		
3.3.9	CST Channel & CST		1 set	Vender to confirm		
3.3.10	PVC channel for wiring		1 set	Vender to confirm		
3.4 Cross Travel (CT) Panel						
3.4.1	MPCB (3 pole), Auto reset	12-16A	1 No.	Vender to confirm		

3.4.2	CT Contactor (RT & LT)	16A, 110 V Model No. 3TF32	2 Nos.	Vender to confirm		
3.4.3	Contactor for RRC Control	9A, 110V Model No. 3TF30	4 Nos	Vender to confirm		
3.4.4	O/L Relay (O/L 5)	6-12.5A	1 No.	Vender to confirm		
3.4.5	Power wiring (Single core multistrand PVC insulated flexible copper wire)	2.5 Sq.mm (R Y B)	1 set	Vender to confirm		
3.4.6	Control wiring (Single core multistrand PVC insulated flexible copper wire)	1.5 sq.mm	1 set	Vender to confirm		
3.4.7	CST Channel & CST		1 set	Vender to confirm		
3.4.8	PVC channel for wiring		1 set	Vender to confirm		
4	Makes of Brought out items					
S No.	Description	Makes	Confirm/Specify	Offered	Remarks	
4.1	Contactors	Siemens only	Vender to confirm			
4.2	Overload Relay	Siemens/GE/Schenider/ABB/L&T/C&S/BCH	Vender to confirm			
4.3	Selector Switch/Rotary switch	Kaycee/BCH/Siemen/Jaibalajee/Essen/Euchner/Phoneix/B alluff/BCH	Vender to confirm			
4.4	MPCB	Siemens/ABB/Legrand/Schenider/C&S/Indoasian/L&T/Standard/BCH/Havells	Vender to confirm			
4.5	Cables	Anchor/Finolex/Havells/Lapp/Radiant/Relicab/KEI/Polycab/ECKO/RR Kabel/HPL/Helu/Torrent/BCH	Vender to confirm			
4.6	HRC Fuse fittings	Siemens/GE.Ferraz (Mersan)/Cooper Bussman/L&T/C&S/Indoasian	Vender to confirm			
5	Description and scope of panel					
S No.	Description		Confirm/Specify	Offered	Remarks	
5.1	The panel shall be of good quality powder coated with 7 tank process upto thickness of 60±5 microns , Degree of protection IP42 and the sheet should be Cold rolled sheet steel of 2mm±10 % thickness, the colour of panel shall be grey		Vender to confirm			
5.2	Removable gland plate 3.15mm thickness shall be provided for mounting of different brought out items		Vender to confirm			
5.3	Panels shall be foot mounted and proper arrangement shall be made to ensure its welding of EOT Crane platform. Panels should have 2 nos front doors with proper locking arrangement		Vender to confirm			
5.2	Panel shall be supplied with all internal wiring comprising of PVC insulated 1.1 KV grade, multistrand flexible copper conductor.		Vender to confirm			

5.3	Wiring associated with a particular phase shall be the colour of that phase viz. Red / Yellow, or Blue. Wiring associated with earthing shall be with green colour insulation and for neutral it shall be with black colour insulation.		Vender to confirm		
5.4	All cables shall have crimped terminations and shall be identified by means of glossy plastic ferrules at both ends, showing the wire number as indicated in the schematic diagrams. The ferrules shall be indelibly marked.		Vender to confirm		
5.5	Wiring to items mounted on hinged doors or wiring that is subject to movement, shall run in helical binding. The binding shall be securely anchored at both ends and sufficient slack provided to prevent any strain being imposed on wiring.		Vender to confirm		
5.6	Motors, Brakes, Lights, Hooter, Limit Switches, RRC, Master Controller which are shown in drawing are not part of scope of supply.				
6	Test & Guarantee :	The supplied equipment including the bought out items should be guaranteed for a period of one year for any fault in material / workmanship.	Vender to confirm		
7	Inspection at vendors works	Inspection of panels at manufacturers works	Vender to confirm		