

# Features and Terminology

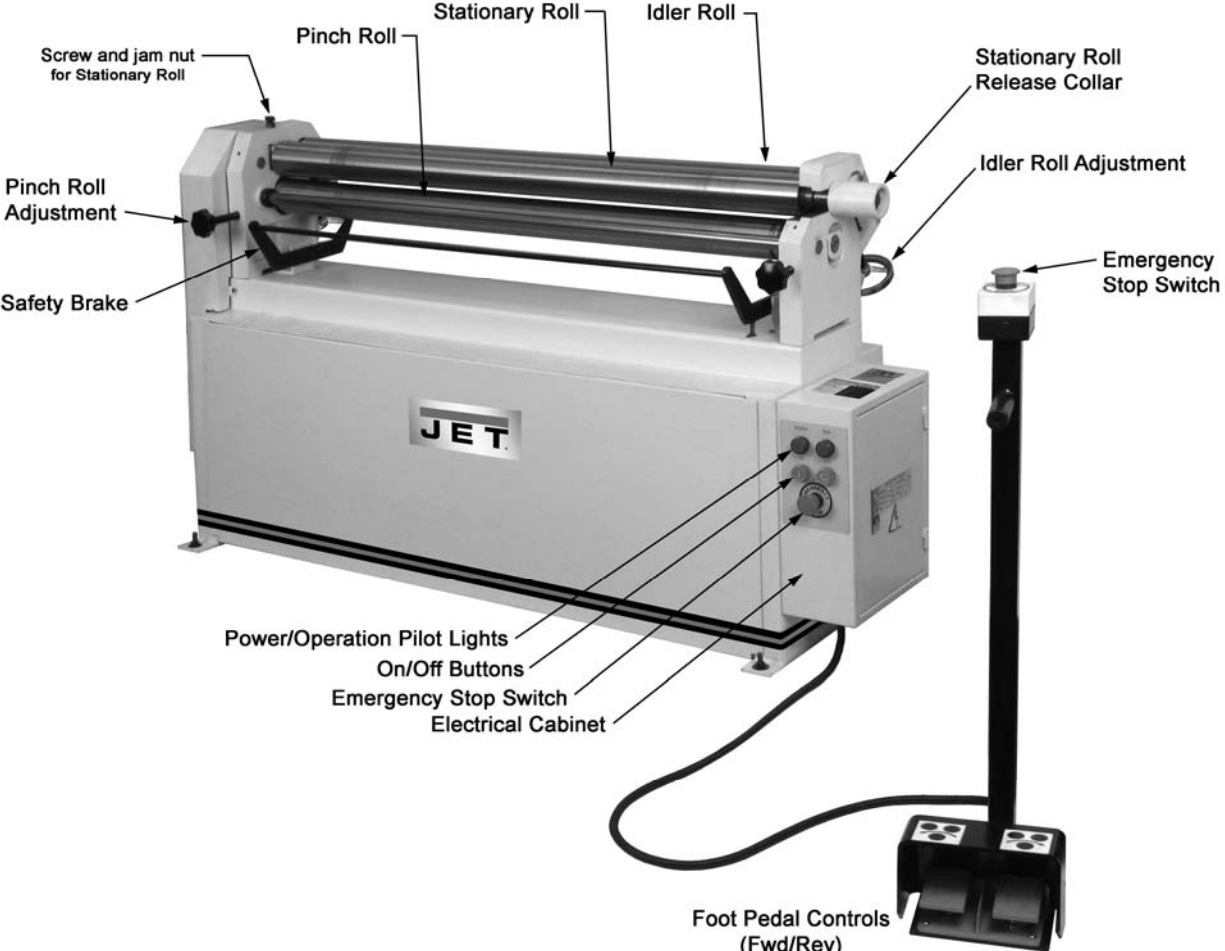


Figure 1 - Features

# Floor mounting holes

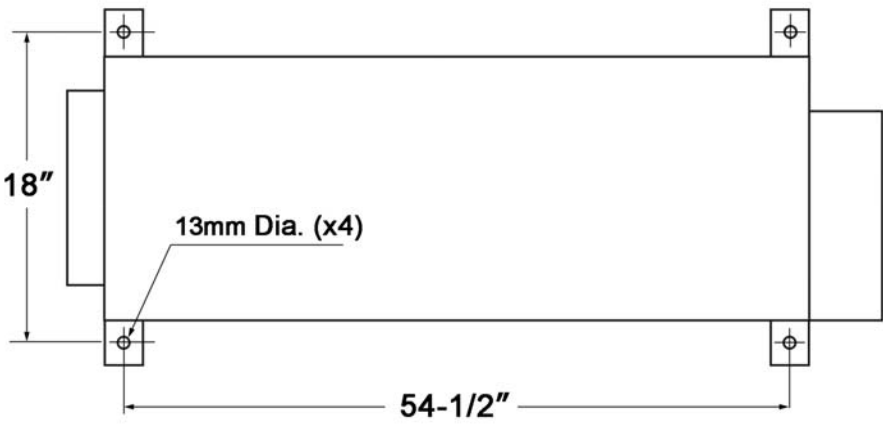
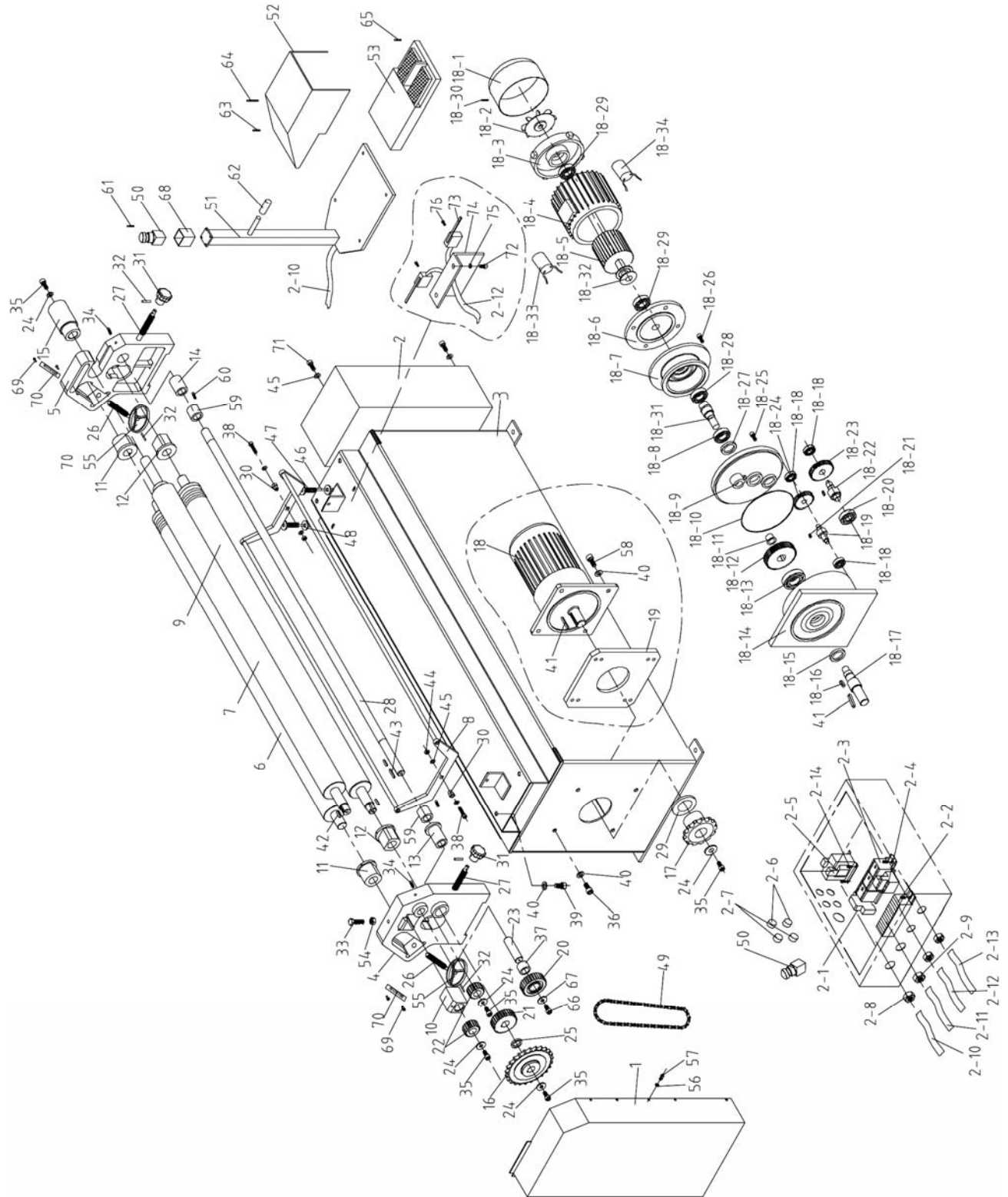


Figure 2 – Hole centers

# Replacement Parts

To order parts or reach our service department, call 1-800-274-6848, Monday through Friday (see our website for business hours, [www.waltermeier.com](http://www.waltermeier.com)). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

## Assembly Drawing for ESR-1650T



## Parts List for ESR-1650T

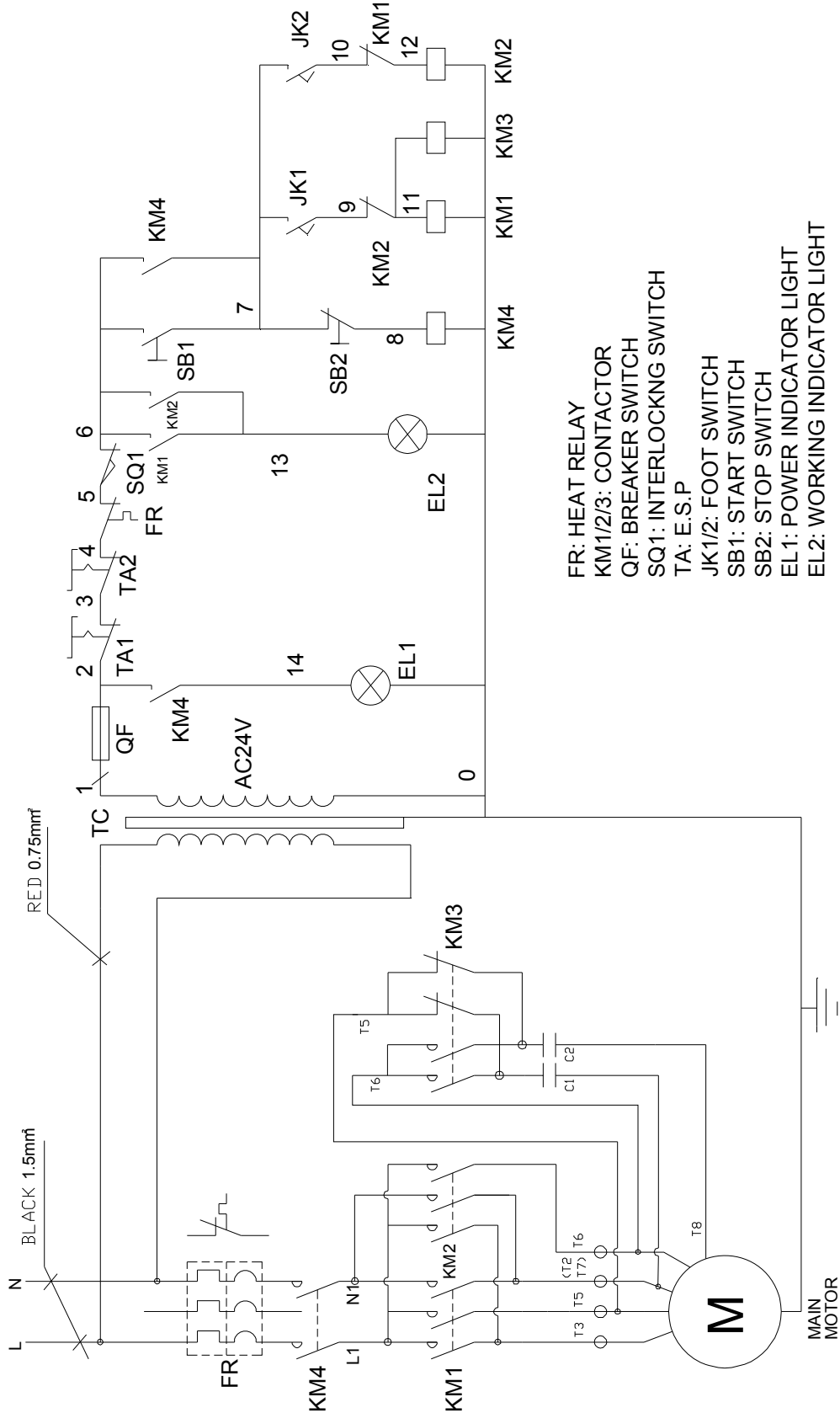
Index No	Part No	Description	Size	Qty
1	ESR1650T-1	Side Cover		1
2	ESR1650T-2	Electric Box		1
2-1	ESR1650T-2-1	Short & Overload Protection	Ω1A	1
2-2	ESR1650T-2-2	Junction Terminal		1
2-3	ESR1650T/3-2-3	A.C. Contactor	three phase	3
	ESR1650T/1-2-3	A.C. Contactor	single phase	4
2-4	ESR1650T/3-2-4	Thermal Relay	2.4-3.6A (3PH)	1
	ESR1650T/1-2-4	Thermal Relay	5.5-8.5A (1PH)	1
2-5	ESR1650T/3-2-5	Transformer	AC 460 230/24V	1
	ESR1650T/1-2-5	Transformer	AC 230 115/24V	1
2-6	ESR1650T-2-6	Power Indicator	AC24V	2
2-7	ESR1650T-2-7	Power On/Off Button	25A	2
2-8	ESR1650T-2-8	Strain Relief	M18	3
2-9	ESR1650T/3-2-9	Strain Relief for 230/460V-3PH	M18	1
	ESR1650T/1-2-9	Strain Relief for 115/230V-1PH	M20	1
2-10	ESR1650T-2-10	Cable for Foot Pedal	Ø16 mm	1
2-11	ESR1650T/3-2-11	Motor Cable	4x1.5mm 230/460V-3PH	1
	ESR1650T/1-2-11	Motor Cable	7x1.5mm 115/230V-1PH	1
2-12	ESR1650T-2-12	Cable for Microswitch		1
2-13	ESR1650T/3-2-13	Power Cord for 3 PH	4x1.5mm 230/460V-3PH	1
	ESR1650T/1-2-13	Power Cord for 1 PH	3x1.5mm 115/230V-1PH	1
2-14	TS-1532032	Phillips Pan Head Machine Screw	M4x10	12
3	ESR1650T-3	Stand		1
4	ESR1650T-4	Left Support		1
5	ESR1650T-5	Right Support		1
6	ESR1650T-6	Rear Roll		1
7	ESR1650T-7	Upper Roll		1
8	ESR1650T-8	Safety Bracket		1
9	ESR1650T-9	Lower Roll		1
10	ESR1650T-10	Square Bushing Upper Roll		1
11	ESR1650T-11	Bushing Rear Roll		2
12	ESR1650T-12	Bushing Lower Roll		2
13	ESR1650T-13	Left Bushing Trans Shaft		1
	ESR1650T-13A	Left Bushing Trans Shaft (for serial nos. over 11110037)		1
14	ESR1650T-14	Right Bushing Trans Shaft		1
	ESR1650T-14A	Right Bushing Trans Shaft (for serial nos. over 11110037)		1
15	ESR1650T-15	Sleeve Handle		1
16	ESR1650T-16	Large Sprocket	P=19.05 Z=25	1
17	ESR1650T-17	Small Sprocket	P=19.05 Z=13	1
18	ESR1650T/3-18	Motor, 220/440V-3PH	0.75kW, 4P	1
	ESR1650T/1-18	Motor, 115/230V-1PH	1.1kW, 4P	1
18-1	ESR1650T-18-1	Motor Fan Cover		1
18-2	ESR1650T-18-2	Motor Fan		1
18-3	ESR1650T-18-3	Housing Cover		1
18-4	ESR1650T/3-18-4	Stator	230/460V-3PH	1
	ESR1650T/1-18-4	Stator	115/230V-1PH	1
18-5	ESR1650T/3-18-5	Rotor	230/460V-3PH	1
	ESR1650T/1-18-5	Rotor	115/230V-1PH	1
18-6	ESR1650T-18-6	Flange Plate		1
18-7	ESR1650T-18-7	Flange Plate Input Shaft		1
18-8	BB-6205	Ball Bearing	Φ52XΦ25X15	1
18-9	ESR1650T-18-9	Reducer Cover		1
18-10	ESR1650T-18-10	O-ring	Φ180XΦ2.6 mm	1
18-11	ESR1650T-18-11	Bushing		1
18-12	ESR1650T-18-12	Gear		1
18-13	BB-6207	Ball Bearing	Φ72XΦ35X7 mm	1

Index No	Part No	Description	Size	Qty
18-14	ESR1650T-18-14	Housing		1
18-15	ESR1650T-18-15	Oil Seal	Φ50XΦ35X7 mm	1
18-16	ESR1650T-18-16	Key	8x25 mm	1
18-17	ESR1650T-18-17	Output Shaft		1
18-18	BB-6301	Ball Bearing	Φ37XΦ12X12	3
18-19	ESR1650T-18-19	Gear Shaft		1
18-20	BB-6303	Ball Bearing	Φ52XΦ15X12	1
18-21	ESR1650T-18-21	Key	5X12 mm	1
18-22	ESR1650T-18-22	Gear Shaft		1
18-23	ESR1650T-18-23	Gear		1
18-24	ESR1650T-18-24	Gear		1
18-25	TS-1503061	Socket Head Cap Screw	M6X25	3
18-26	ESR1650T-18-26	Bolt	M5X25	3
18-27	ESR1650T-18-27	Oil Seal	Φ37XΦ17X7	1
18-28	BB-6208	Ball Bearing	Φ80XΦ40X18	1
18-29	BB-6205	Ball Bearing	Φ52XΦ25X12	2
18-30	ESR1650T-18-30	Screw	M4X8	3
18-31	ESR1650T-18-31	Connecting Shaft		1
18-32	ESR1650T/1-18-32	Centrifugal Switch for 1PH only		1
18-33	ESR1650T/1-18-33	Start Capacitor for 1PH only	35uf	1
18-34	ESR1650T/1-18-34	Run Capacitor for 1PH only	200uf	1
19	ESR1650T-19	Motor Mount		1
20	ESR1650T-20	Gear	m=2.5 z=30	1
21	ESR1650T-21	Drive Gear	m=2.5 z=30	1
22	ESR1650T-22	Driven Gear	m=2.5 z=18	2
23	ESR1650T-23	Gear Wheel Shaft		1
24	TS-1550071	Flat Washer	Φ10 mm	6
25	ESR1650T-25	Adjusting Washer	Φ35XΦ25.5X5 mm	1
26	ESR1650T-26	Bolt for Adjusting Roller		2
27	ESR1650T-27	Bolt for Auxiliary Roller		2
28	ESR1650T-28	Transmission Shaft		1
29	ESR1650T-29	Washer		1
30	ESR1650T-30	Bushing		2
31	ESR1650T-31	Handle		4
32	ESR1650T-32	Pin		4
33	ESR1650T-33	Bolt	M12X55	1
34	TS-1524051	Set Screw	M8x20	2
35	TS-1491021	Hex Cap Screw	M10x20	5
36	ESR1650T-36	Bolt	M12x25	4
37	ESR1650T-37	Bushing		1
38	ESR1650T-38	Screw	M8X40	2
39	TS-1492031	Hex Cap Screw	M12X35	4
40	TS-2360121	Flat Washer	Φ12 mm	8
41	ESR1650T-41	Key	8X45 mm	1
42	ESR1650T-42	Key	6X25 mm	3
43	ESR1650T-43	Key	6X40 mm	1
44	TS-2311081	Nut	M8	2
45	TS-1550061	Flat Washer	Φ8 mm	4
46	ESR1650T-46	Worm Rod		2
47	ESR1650T-47	Lock Spring		2
48	ESR1650T-48	Flat Washer		4
49	ESR1650T-49	Chain		1
50	ESR1650T-50	Emergency Switch		1
51	ESR1650T-51	Pole		1
52	ESR1650T-52	Box Cover		1
53	ESR1650T-53	Pedal Switch		1
54	TS-1540081	Nut	M12	1
55	ESR1650T-55	Wheel		2
56	TS-1540041	Flat Washer	Φ6 mm	5

Index No	Part No	Description	Size	Qty
57	TS-2246162	Socket Head Button Screw	M6X16	5
58	TS-1505051	Socket Head Cap Screw	M10x35	4
59	ESR1650T-59	Connecting Bushing		2
60	ESR1650T-60	Fixing Screw	M6x8	2
61	ESR1650T-61	Cross Head Screw	M6x65	4
62	ESR1650T-62	Handle Sleeve		1
63	TS-2285302	Phillips Pan Head Machine Screw	M5x30	2
64	ESR1650T-64	Cross Head Screw	M5x95	2
65	TS-1534052	Phillips Pan Head Machine Screw	M6x16	4
66	TS-1482041	Hex Cap Screw	M6x20	1
67	TS-1540041	Flat Washer	Φ6 mm	1
68	ESR1650T-68	Switch Box		1
69	ESR1650T-69	Rivet for Scale	Φ2×6 mm	4
70	ESR1650T-70	Scale		2
71	TS-1490031	Hex Cap Screw	M8×20	2
72	TS-1482031	Hex Cap Screw	M6×16	2
73	ESR1650T-73	Microswitch		2
74	ESR1650T-74	Microswitch Mount		1
75	ESR1650T-75	Washer	Φ6 mm	2
76	ESR1650T-76	Screw	M4X10	4

# Wiring Diagram for ESR-1650T-1

## (Single Phase only)



# Wiring Diagram for ESR-1650T-3

**(Three Phase only)**

