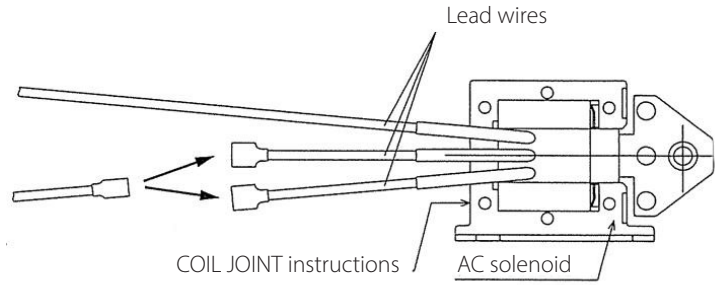


CIRCUIT DIAGRAM

Caution

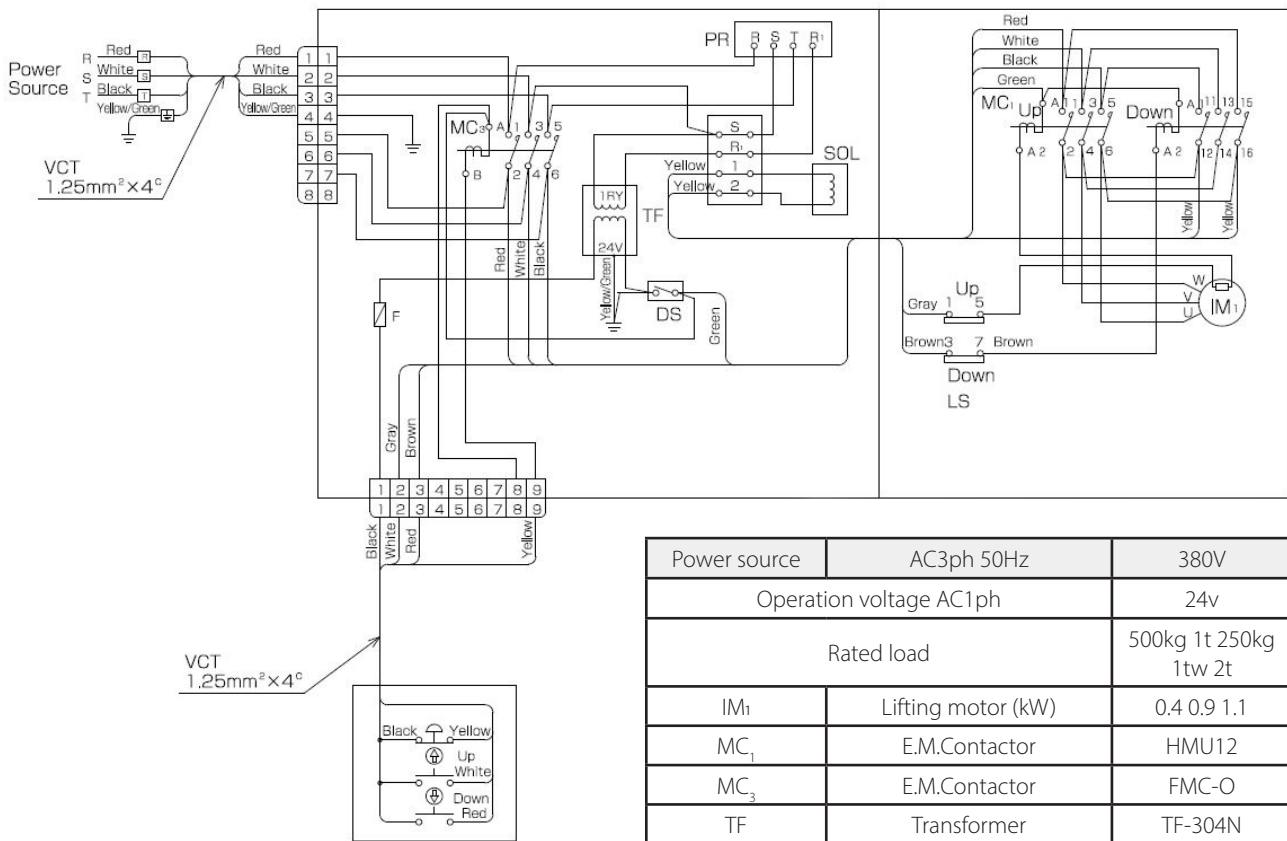
Remove P/No.093 Switch cover. Next connect the Lead wires correctly while referring to COIL JOINT instructions. The unused lead wires get broken sometimes when they are accidentally caught in the brake. Bind them together and make sure that they do not get caught in the brake.



! DANGER

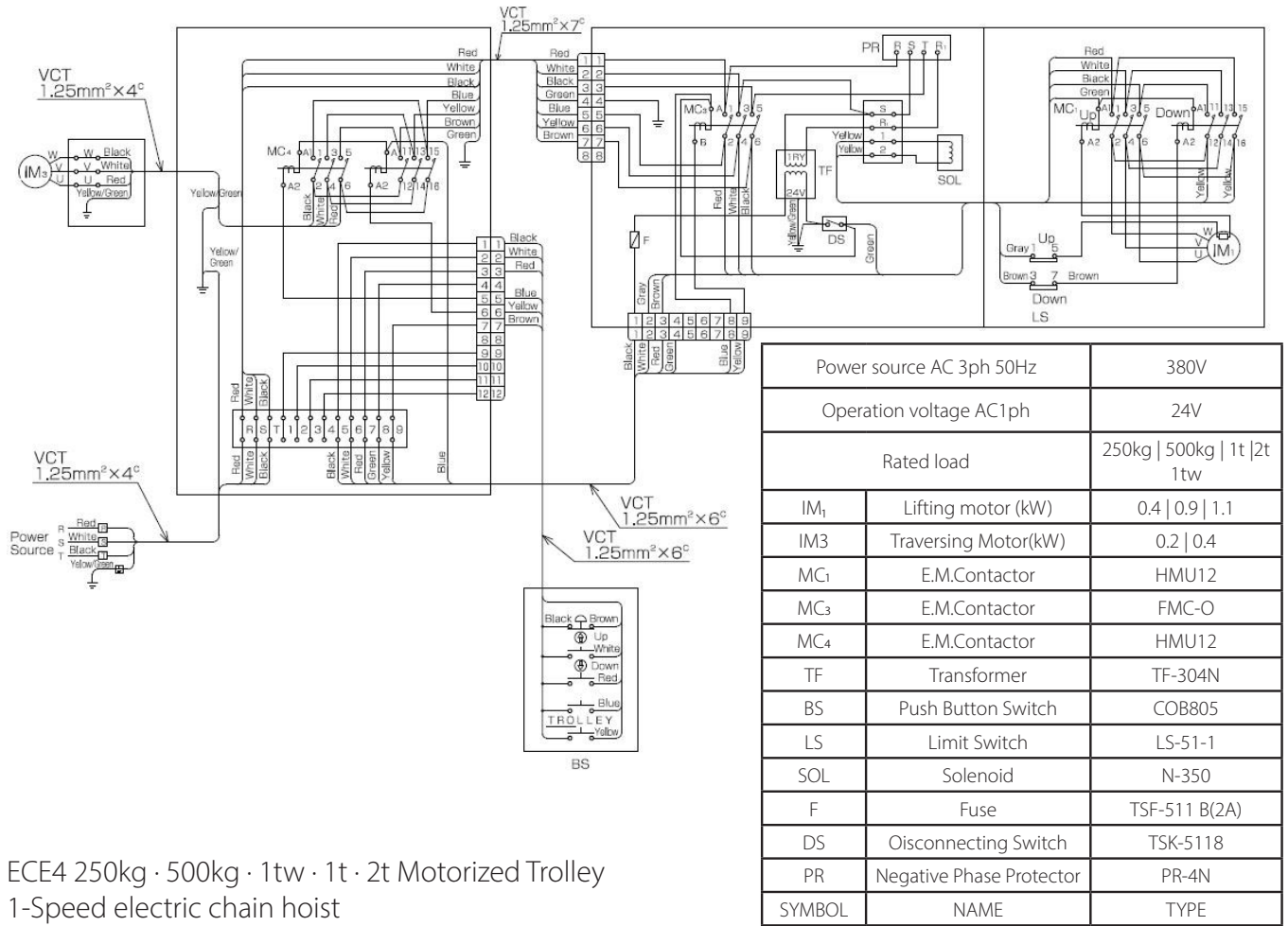
• Be sure to turn off the power source before changing the lead wire.

EC4 250kg · 500kg · 1tw · 1t · 2t
Suspended Type 1-Speed electric chain hoist

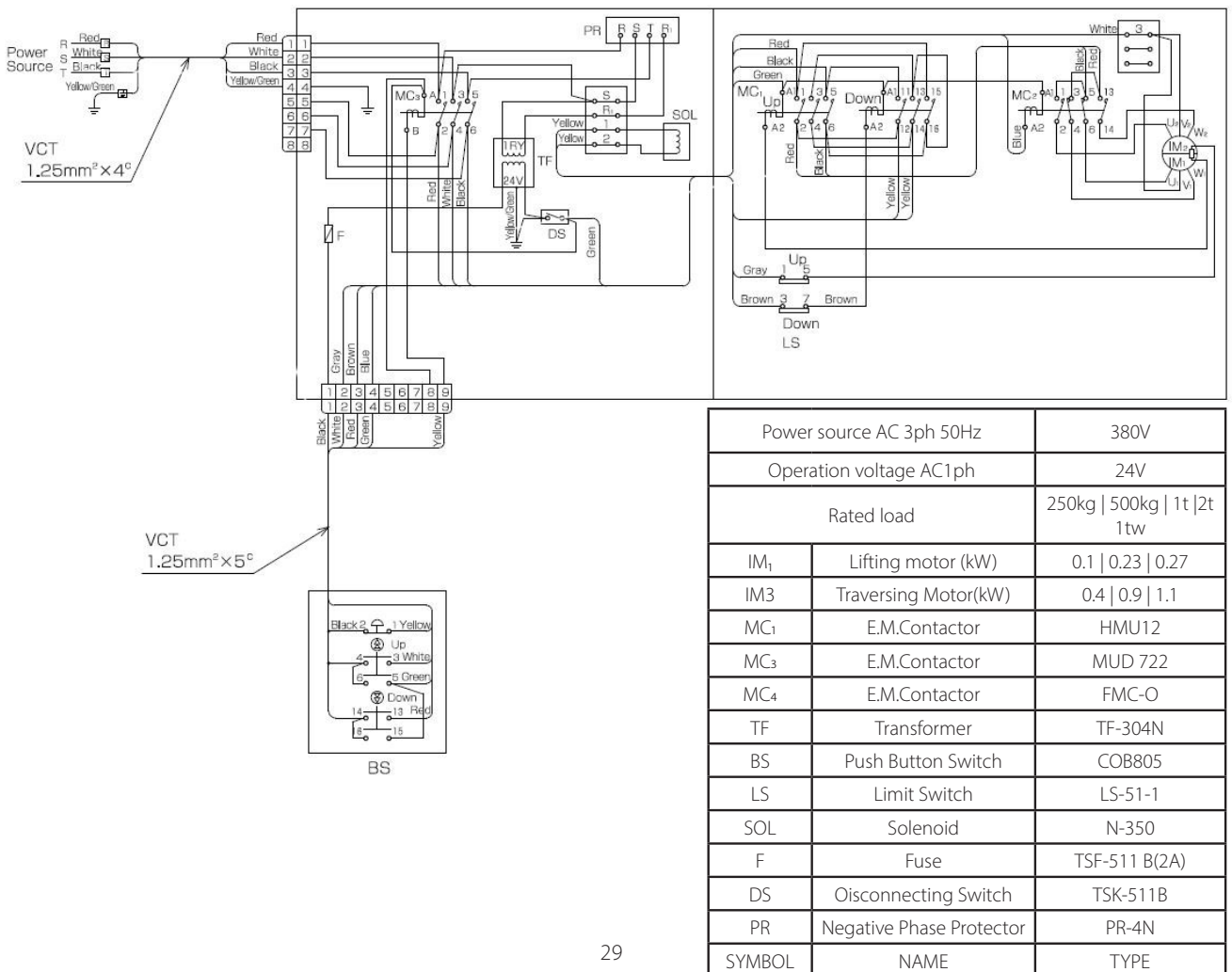


Power source	AC3ph 50Hz	380V
Operation voltage AC1 ph	24v	
Rated load	500kg 1t 250kg 1tw 2t	
IM ₁	Lifting motor (kW)	0.4 0.9 1.1
MC ₁	E.M.Contactor	HMU12
MC ₃	E.M.Contactor	FMC-O
TF	Transformer	TF-304N
BS	Push Button Switch	COB803
LS	Limit Switch	LS-51-1
SOL	Solenoid	N-350
F	Fuse	TSF-511B(2A)
DS	Disconnecting switch	TSL-511B
PR	Negative phase protector	PF-4N
SYMBOL	NAME	TYPE

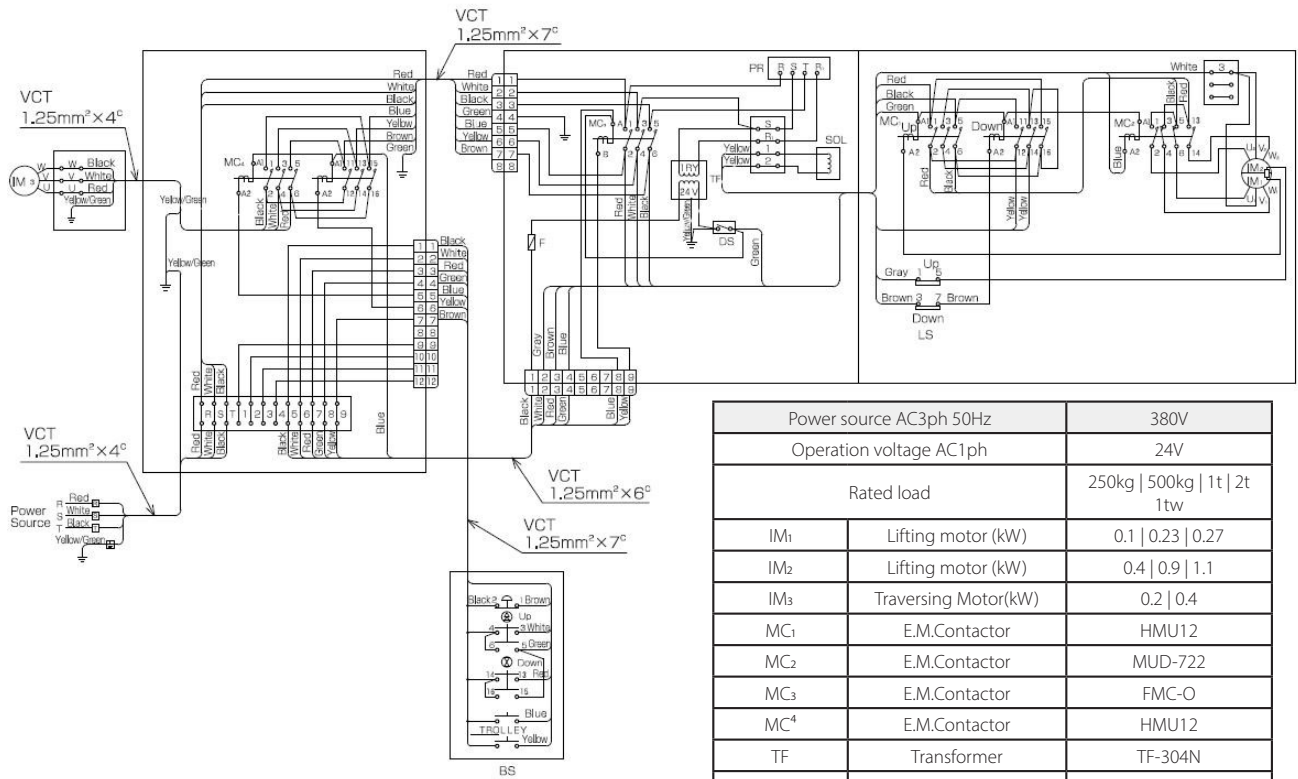
ECE4 250kg · 500kg · 1tw · 1t · 2t Motorized Trolley 1-Speed electric chain hoist



ECE4 250kg · 500kg · 1tw · 1t · 2t Motorized Trolley 1-Speed electric chain hoist

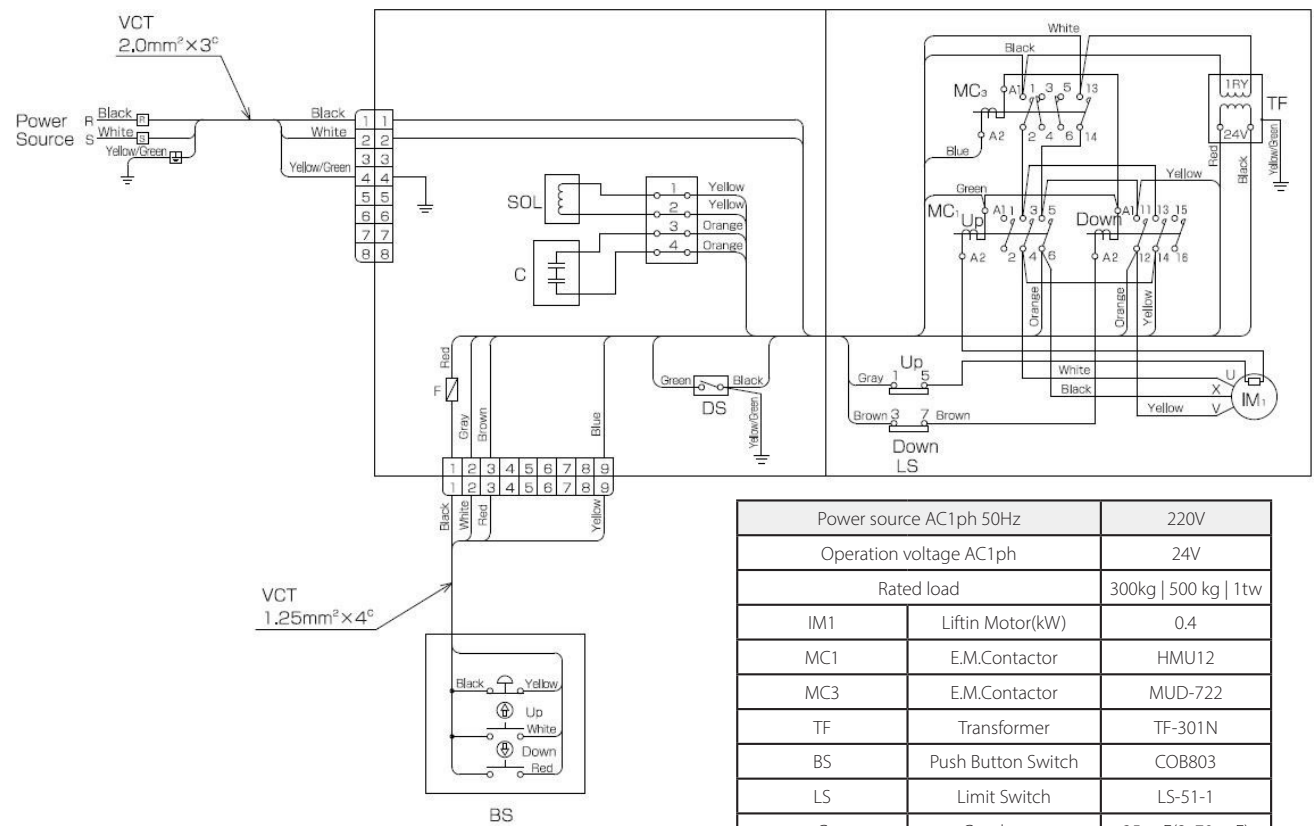


ECTE4 250kg · 500kg · 1tw · 1t · 2t Motorized Trolley Type 2-Speed electric chain hoist



Power source AC3ph 50Hz		380V
Operation voltage AC1 ph		24V
Rated load		250kg 500kg 1t 2t 1tw
IM ₁	Lifting motor (kW)	0.1 0.23 0.27
IM ₂	Lifting motor (kW)	0.4 0.9 1.1
IM ₃	Traversing Motor(kW)	0.2 0.4
MC ₁	E.M.Contactor	HMU12
MC ₂	E.M.Contactor	MUD-722
MC ₃	E.M.Contactor	FMC-O
MC ₄	E.M.Contactor	HMU12
TF	Transformer	TF-304N
BS	Push Button Switch	COB805
LS	Limit Switch	LS-51-1
SOL	Solenoid	N-350
F	Fuse	TSF-511B(2A)
DS	Disconnecting Switch	TSK-511B
PR	Negative Phase Protector	PR-4N
SYMBOL	NAME	TYPE

ECC4 300kg · 500kg · 1 tw
Suspended Type Single-phase electric chain hoist



Power source AC1ph 50Hz		220V
Operation voltage AC1ph		24V
Rated load		300kg 500kg 1tw
IM1	Liftin Motor(kW)	0.4
MC1	E.M.Contactor	HMU12
MC3	E.M.Contactor	MUD-722
TF	Transformer	TF-301N
BS	Push Button Switch	COB803
LS	Limit Switch	LS-51-1
C	Condenser	35 μ. F(2x70 μ. F)
SOL	Solenoid	N-350
F	Fuse	TSF-511 B
DS	Disconnectin Switch	TSF-511 B
SYMBOL	NAME	TYPE

POWER SOURCE CABLE SPECIFICATION

Motorized trolleys are supplied with 1m long power source cables and manually operated trolleys are supplied with 5m long power source cables. Please select the appropriate sized cable from Table 12 when lengthening the power source cable.

Table 12

Type of hoist		Rated load	Cable length			
			10	20	30	40
Hoist with motorized trolley	1-Speed	250kg	The 1.25mm ² (standard) power source cable can be used for lengths up to 50 meters.			
		500kg - 1tw				
		1t				
		2t				
	2-Speed	250kg				
		500kg - 1tw				
		1t				
		2t				
Hook suspension hoist and hoist with geared or plain trolley	1-Speed	250kg				
		500kg - 1tw				
		1t - 2t				
	2-Speed	250kg				
		500kg - 1tw				
		1t - 2t				
	Single-Phase	300kg - 500kg 1tw	2.0mm ² (standard)		3.5mm ²	

SPARE PARTS TABLE AND SPARE PARTS CODE TABLE

⚠ DANGER

 Only use genuine NITCHI spare parts.

When ordering spare parts, specify the model, capacity, serial number, code number, and the quantity.

✘ Specify the height of length.

✘ Refer to page-9, 1 O

How to use the spare parts table

Model	_____	EC4		
Rated load	_____	250kg	500kg	1tw
Code number	_____	DEC4001		

Part number	Part name	Nos used	EC4				ECT4				ECC4			Remarks
			250kg	500kg	1tw	1t	2t	250kg	500kg	1tw	1t	2t	300kg	
001	Center frame	1		DEC4001		JEC4001		DEC4001		JEC4001		DEC4001		
002	Gear-side plate	1		DEC4002		JEC4002		DEC4002		JEC4002		DEC4002		
003	Load sheave	1		BEC3003		JEC4003		BEC3003		JEC4003		BEC3003		
004	Frame pin	1		DEC4004		JEC4004		DEC4004		JEC4004		DEC4004		
005	Load chain guide	1		DEC4005U		JEC4005U		DEC4005U		JEC4005U		DEC4005U		
006	Chain guide stay	1		DEC4006				DEC4006				DEC4006		
007	Chain guide roller	1		DEC4007				DEC4007				DEC4007		
008	Load chain	1		CT-6.3		CT-7.1		CT-6.3		CT-7.1		CT-6.3		✕1
009	Motor-side plate	1		DEC4009		JEC4009		DEC4009		JEC4009		EEC4009C		
010	Stay bolt	1		DEC4010		JEC4010		DEC4010		JEC4010		DEC4010		
014	Pinion shaft	1		DEC4014		JEC4014		DED4014		JED4014		EEC4014C		
015	Pinion gear	1		DEC4015		JEC4015		DED4015		JED4015		DED4015		
016	Second pinion	1		DEC4016		JEC4016		DED4016		JED4016		DEC4016	GEC4016C	
019	Load gear	1		DEC4019		JEC4019		DEC4019		JEC4019		DEC4019		
029	Gear case assembly	1set		DEC4029S		JEC4029S		DEC4029S		JEC4029S		EEC4029CS		
034	Brake unit	1set		DEC4034				DEC4034				EEC4034C		
035	Brake wheel	1		-				-				EEC4035C		
036	Brake bushing	1		DEC4036				DEC4036				-		
038	Brake base	1		DEC4038				DEC4038				EEC4038C		
039	Brake fixed plate	1		DEC4039				DEC4039				-		
040	Brake lining	2		DEC4040				DEC4040				-		
041	Brake forcing plate	1		GEC3041				GEC3041				EEC4041C		
042	Brake lever	1		DEC4042				DEC4042				DEC4042		
043	Brake lever base	1		BEC3043				BEC3043				BEC3043		
052	Coupling	1		DEC4052		JEC4052		DEC4052		JEC4052		DEC4052		
054	Motor flange	1		DEC4054		JEC4054		DEC4054		JEC4054		EEC4054C		
055	Rotor	1	DEC4055	GEC4055		JEC4055		DED4055B	GED4055	JED4055		EEC4055C		
056	Stator	1	DEC4056BCE	GEC4056BCE		JEC4056BCE		DED4056BCE	GED4056BCE	JED4056BCE		EEC4056C3CE		
058	Through balts	4		DEC4058		JEC4058		DEC4058		JED4058		EEC4058C		
061	Limit unit	1set		DEC4061				DEC4061				DEC4061		
066	Switch pin	1		DEC4066		JEC4066		DEC4066		JEC4066		DEC4066		
074	Handle	1		DEC4074		JEC4074		DEC4074		JEC4074		DEC4074		

Part number	Part name	Nos used	EC4				ECT4				ECC4			
			250kg	500kg	1tw	2t	1t	2t	250kg	500kg	1tw	2t	300kg	500kg
082	Motor cover	1		DEC4082	JEC4082	JEC4082								
084	Electrical components	1set		DEG4084ES	DEG4084ES	DEG4084ES							DEC4082	
085	Electrical components	1set		DEG4085E	DEG4085E	DEG4085E							EEG4084EGS	
091	Cable securing plate	1		DEG4091	DEG4091	DEG4091							EEG4085EGS	
093	Switch cover	1		DEG4093	JEG4093	JEG4093							DEG4091	
098	Wire hanger	1		DEG4098	DEG4098	DEG4098							DEG4093	
100	Top hook pin	in()	DEG4100(1)	DEC4100(2)	JEC4100(1)	JEC4100(2)	DEG4100(1)	DEC4100(2)	JEC4100(1)	JEC4100(2)	DEG4100(1)	DEC4100(2)	DEG4100(1)	DEC4100(2)
104	Chain bucket assembly	1set												
105	Chain bucket pin	2		DEG4105	JEG4105	JEG4105							DEG4105	
107	Chain stop plate	1	-	JEC4107W	JEC4107W	JEC4107W	-	JEC4107W	JEC4107W	JEC4107W	-	JEC4107W	JEC4107W	JEC4107W
108	Chain stop pin	1	-	JEC4108W	JEC4108W	JEC4108W	-	JEC4108W	JEC4108W	JEC4108W	-	JEC4108W	JEC4108W	JEC4108W
109	Chain stop pin securing plate	1	-	JEC4109W	JEC4109W	JEC4109W	-	JEC4109W	JEC4109W	JEC4109W	-	JEC4109W	JEC4109W	JEC4109W
110	Top hook assembly	1set	GEG311OU	JEC411OXW	JEC411OX	LEC411OX	GEG311OU	JEC411OX	JEC411OX	LEC411OX	JEC411OX	LEC411OX	GEG311OU	JEC411OXW
115	Bottom hook assembly	1set	EEC3115X	GEC3115X	JEC3115UW	LEC3115U	EEC3115X	GEC3115X	JEC3115UW	LEC3115U	EEC3115X	GEC3115X	GEC3115X	JEC3115UW
125	Bolt & nut for holder	1		HH4005048T	HH4005048T	HH4005048T							HH4005048T	
126	Safety latch assembly (for Top hook)	1	HH4010074T	HH4010074T	HH4015074T	HH4010074T	HH4010074T	HH4015074T	HH4015074T	HH4015074T	HH4010074T	HH4010074T	HH4010074T	HH4015074T
127	Safety latch assembly (for Bottom hook)	1	HH4005074T	HH4010074T	HH4015074T	HH4010074T	HH4010074T	HH4015074T	HH4015074T	HH4015074T	HH4005074T	HH4005074T	HH4010074T	HH4010074T
128	Spring collar	2	-	JEC4128W	JEC4128W	JEC4128W	-	JEC4128W	JEC4128W	JEC4128W	-	JEC4128W	JEC4128W	JEC4128W
131	Stop holder	1set		MH4005B25T	MH4005B25T	MH4005B25T							MH4005B25T	
501	Ball bearing	1	6004ZZNR	6004ZZNR	6005ZZNR	6004ZZNR	6004ZZNR	6005ZZNR	6005ZZNR	6005ZZNR	6004ZZNR	6004ZZNR	6004ZZNR	6004ZZNR
502	Ball bearing	1	6201ZZNR	6201ZZNR	6202ZZNR	6201ZZNR	6201ZZNR	6202ZZNR	6202ZZNR	6202ZZNR	6201ZZNR	6201ZZNR	6201ZZNR	6201ZZNR
503	Ball bearing	1	6202ZZNR	6202ZZNR	6303ZZNR	6202ZZNR	6202ZZNR	6303ZZNR	6303ZZNR	6303ZZNR	6202ZZNR	6202ZZNR	6202ZZNR	6202ZZNR
504	Ball bearing	1	6005ZZNR	6005ZZNR	6206ZZNR	6005ZZNR	6005ZZNR	6206ZZNR	6206ZZNR	6206ZZNR	6005ZZNR	6005ZZNR	6005ZZNR	6005ZZNR
505	Retaining ring - Ctype	1	51025	51025	51029	51025	51025	51029	51029	51029	51025	51025	51025	51025
508	Ball bearing	1	6005ZZNR	6005ZZNR	51029	6005ZZNR	6005ZZNR	6005ZZNR	6005ZZNR	6206ZZNR	6005ZZNR	6005ZZNR	6005ZZNR	6005ZZNR
511	Wave washer	6		-	-	-							WW-20	
512	Retaining ring - Ctype	1		51020	51020	51020							-	
513	Retaining ring - Ctype	1		51020	51022	51022							51020	51020

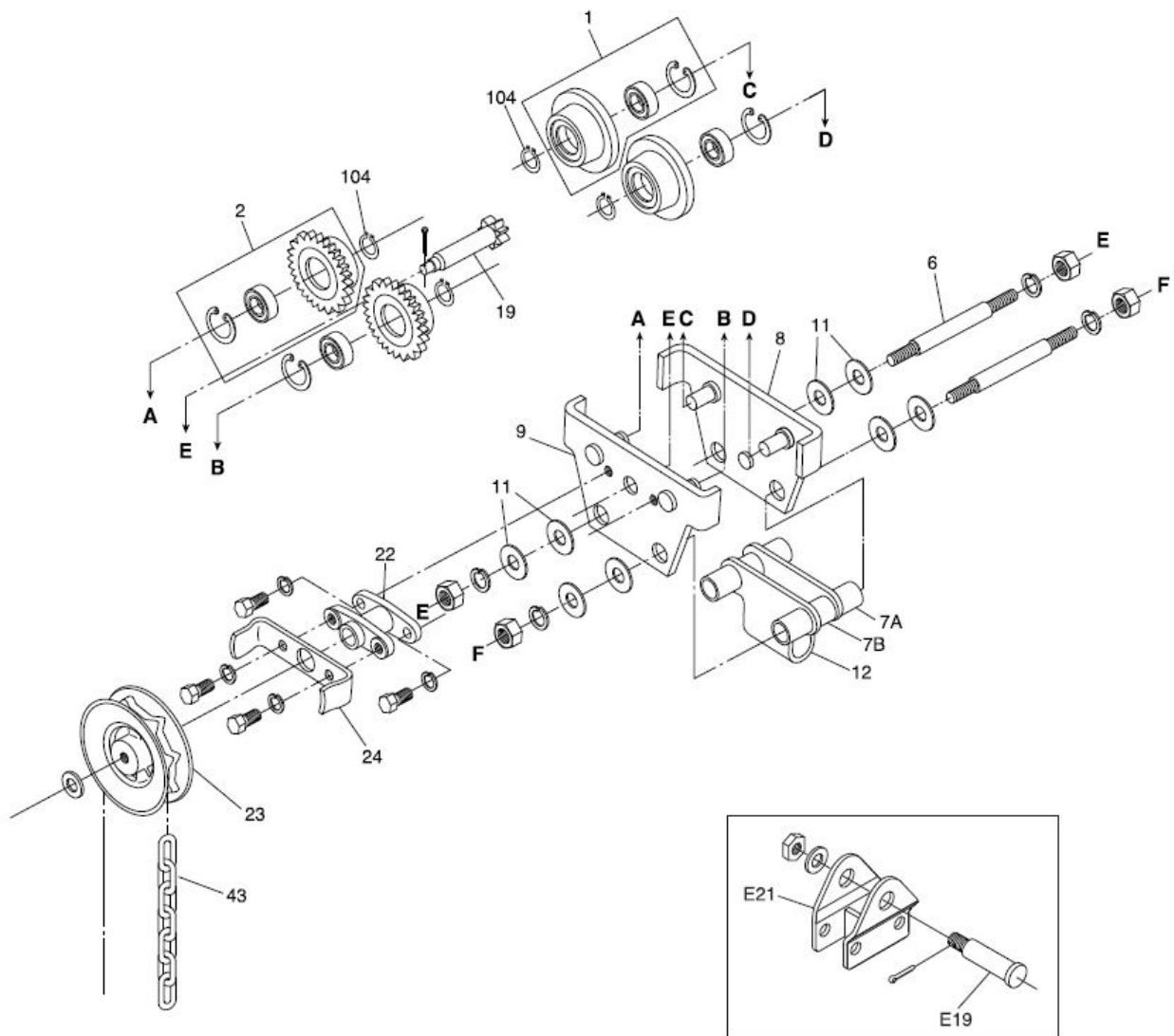
Refer to the Chain bucket application table on page-6.

Part number	Part name	Nos used	EC4						ECT4						ECC4		
			250kg	500 kg	1tw	1t	2t		250kg	500kg	1tw	1t	2t		300kg	500kg	1tw
516	Center frame gasket	1		DEC4516		JEC4516											
518	Ball bearing	1		6004LLUNR													
519	Ball bearing	1		6201ZZNR		6202ZZNR											
520	Ball bearing	1		6202ZZNR		6202ZZNR											
530	Nylon nut	2		M6													
531	Brake adjusting screw	1		M8X35													
534	Bolt for lever	2		CBM6X55-03													
535	Fastening screws	4		BEC3554U													
537	Brake spring	1		DEC4537													
538	Brake base springs	4		-													
539	AC solenoid	1		N-350													
541	Flat washer	1		-													
542	Fine u-nut	1		-													
547	Ball bearing	1		6204ZZNR		6205ZZNR											
548	Ball bearing	1		6303ZZNR		6204ZZNR											
551	Limit switch	1		LS-51-1													
560	Motor cover gasket	1		DEC4560		JEC4560											
561	Gear case gasket	1		DEC4561		JEC4561											
581	Condenser	2		-													
583	Rubber protector	1		DEC4583													
585	Connector cover gasket	2		DEC4585													
587	Power source cable	1		DEC4587E													
588	Pendant control cable assembly	1															
590	Push button switch	1															
631	Tail spring	2	DEC4631	GEC3705	JEC4631	JEC3705	JEC4631	JEC3705	IGEC3705	JEC4631	JEC4631	JEC3705	DEC4631	JEC4631	GEC3705	GEC3705	
638	Spring for 2 falls	1		JEC4638W		JEC4638W											
650	Electromagnetic contactor	1		FMC-0(24V)													
651	Electromagnetic contactor	1		HMU1224													
652	Electromagnetic contactor	1		-													
653	Transformer	1		TF -304N													
654	Negative phase protector	1		PR-4N													
659	Fuse	1		2A													

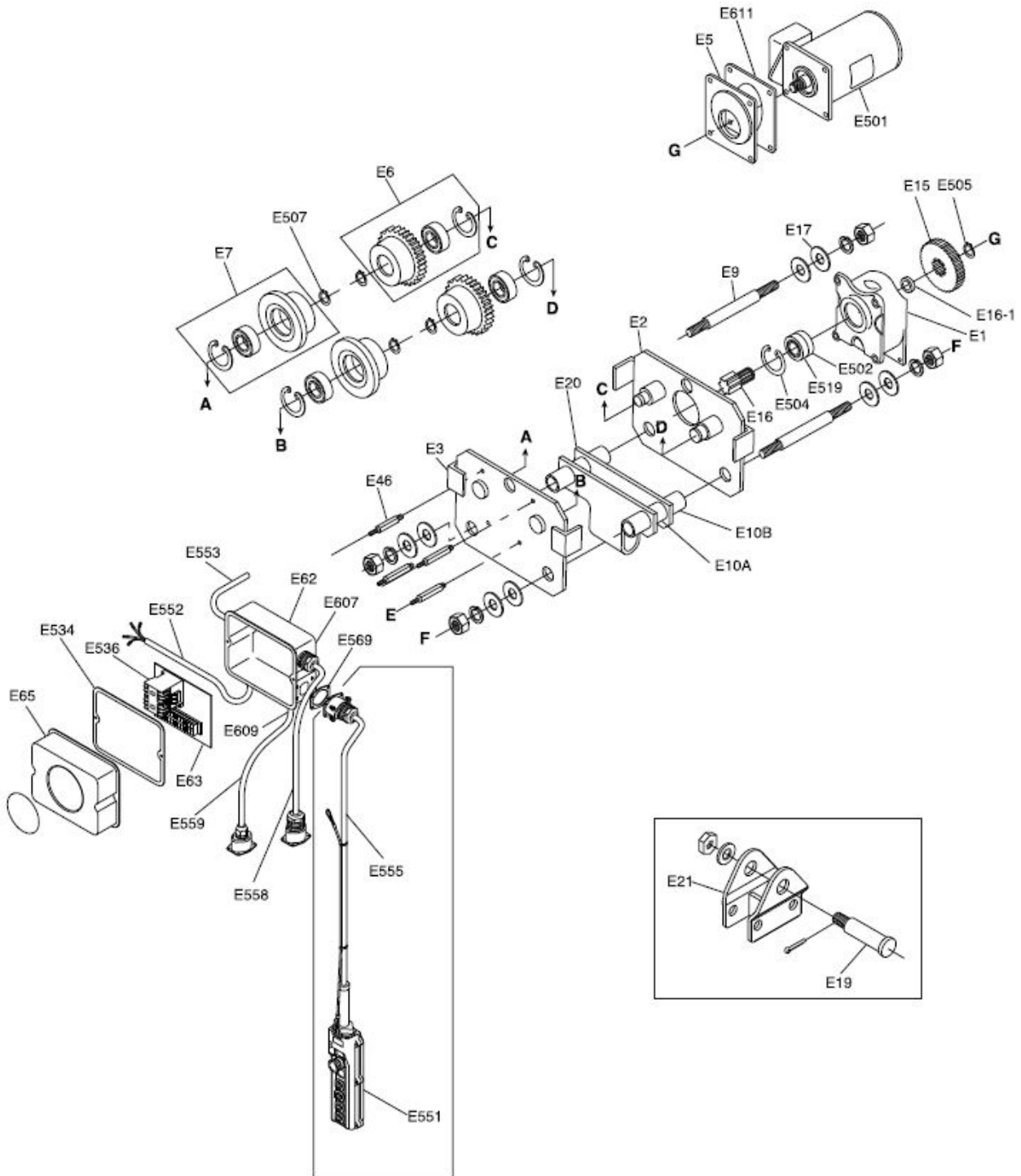
Specify the type of push button switch and the length of the pendant cable.

Refer to code numbers shown in the circuit diagram tables.

Part number	Part name	Nos used	EC4				ECT4				ECC4			Remarks	
			250kg	500kg	1tw	1t	2t	250kg	500kg	1tw	1t	2t	300kg		500kg
020	Friction OLP unit	1	DEC40200	GEC40500	JEC40200	JEC40200	JEC40200	DED40200	GED40200	JED40200	JED40200	EEC4020CO	GEC4020CO	GEC4020CO	
021	Third pinion (OLP)	1		DEC40210	JEC40210	JEC40210		DEC40210		JEC40210	JEC40210		DEC40210		
022	Friction gear	2		DEC40220	JEC40220	JEC40220		DED40220		JED40220	JED40220	DEC40220	GEC40220	GEC40220	
024	Friction hub	1		DEC40240	JEC40240	JEC40240		DEC40240		JEC40240	JEC40240		DEC40240		
025	Friction boss	1		DEC40250	JEC40250	JEC40250		DEC40250		JEC40250	JEC40250		DEC40250		
026	Friction metal	1		RCS 106017	JEC40260	JEC40260		RCS 106017		JEC40260	JEC40260		RCS 106017		
027	Disk spring collar	1		DEC40270	JEC40270	JEC40270		DEC40270		JEC40270	JEC40270		DEC40270		
640	Disk spring	2		MDS25-1	MDS30-1	MDS30-1		MDS25-1		MDS30-1	MDS30-1		MDS25-1		
641	Nylon - nut	1		HNN1 M14X 1.5C3	HNN1 M20X 1.5	HNN1 M20X 1.5		HNN1 M14X 1.5C3		HNN1 M20 X 1.5	HNN1 M20 X 1.5		HNN1M14X1.5C3		



Part number	Part name	Nos, used		250kg	300kg	500kg	1tw	1t	2t	Remarks
		EGT5	EPT5							
1	Plain wheel assembly	2	4	JGT5001T				LGT5001TSN		
2	Gear wheel assembly	2	-	JGT5002T				LGT5002TSN		
6	Stay balts	2	2	LGT5006				LGT5006SN		
7A	Stay pipes A	4	4	JGE5007ASN				LGE5007ASN		
7B	Stay pipes B	2	2	JGE5007BSN				LGE5007BSN		
8	Plain-side plate	1	2	JGT5008TSN				LGT5008TSN		
9	Gear-side plate	1	-	JGT5009TSN				LGT5009TSN		
11	Spacer washer	×	×	PWM20				LGT5011SN		
12	Top holder	1	1	GGE5012SN			JGE5012SN	LGE5012SN		
19	Pinion shaft	1	-	JGE5019				LGE5019		
22	Pinion shaft metal	1	-	JGE5022				LGE5022		
23	Hand wheel	1	-	JGT5023				LGT5023		
24	Hand chain guide	1	-	JGT5024				LGT5024		
43	Hand chain	1	-	J-5					×1	
E19	Top holder pin	1	1				GET5019	-	LET50i9	
E21	Connecting plate	1	1				GET6021	-	LET6021	
104	Retaining ring - Ctype	4	4	LGT5001TSN				51020		



Part number	Part name	Nos, used	250kg	500kg	1tw	1t	2t	Remarks
E1	Gear box	1	BET6001U				LET6001U	
E2	Gear-side plate	1	BET5002CEU				LET5002CEU	
E3	Plain-side plate	1	BET5003CEU				LET5003CEU	
E5	Support for motor flange	1	BET5005				LET5005	
E6	Gear wheel assembly	2	BET5006LRT				LET5006LRT	
E7	Plain wheel assembly	2	BET5007LRT				LET5007LRT	
E9	Stay balts	2	BET50098				LET5009LR	
E15	Pinion gear	1	BET5015				LET5015	
E16	Pinion	1	BET5016				LET5016	
E16-1	Pinion collar	1	BET50161				LET50161	
E17	Spacer washer		PWM20				LGT5011SN	
E19	Top holder pin	1	-		GET5019	-	LET5019	
E20	Top holder	1	BET5020LRT			JET6020LRT	LET5020LRT	
E21	Connecting plate	1	-		JET6021	-	LET6021	
E46	Balts for E62	4	BET5046					
E62	Switch holder	1	DET6062					
E63	Base plate	1	DET6063CEU					
E65	Switch cover	1	BET5065					
E501	Motor	1	6205LLU				LET6501B	
E502	Ball bearing	1	6004Z				6205Z	
E504	Retaining ring - C type	1	50042				50052	
E505	Retaining ring - C type	1	51020				51025	
E507	Retaining ring - C type	4	51015				51025	
E519	Ball bearing	1	6004LLU				6205LLU	
E534	Gasket for E62	1	DET6534					
E536	Electromagnetic contactor	1	HMU1224					
E551	Push button switch	1	Refer to card numbers shown in the circuit diagram tables.					
E552	Power source cable	1	DET6552					
E553	Trolley cable	1	DET6553				LET6553	
E555	Push button cable assembly	1	Specify the type of push button switch and the length of the pendant cable.					
E558	Connecting cable(power)	1	DET6558CE				LET6558CE	
E559	Connecting cable(control)	1	DET6559CE				LET6559CE	
E569	Connector cover gasket	1	DEC4585					
E607	Cord loek	2	OA-W2216					
E609	Cord loek	2	SK-14L					
E611	Gasket for E5	1	DET6611				LET6611	