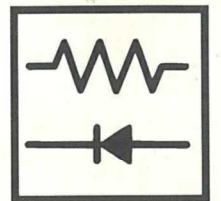


Mazak

ELECTRIC WIRING DIAGRAM





ELECTRICAL CIRCUIT DIAGRAMS

SET NO.	DD320003014
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SET NO.	DL320LMC250
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ELEMENTARY DIAGRAM LIST

SET No. : DD320003014

Drawn By: M. Kowl 28. AUG. '00

Checked By: Y. Nakamura 29-Aug-00

Approved By: T. Okumura 8-29-00

No.	ITEM	SPECIFICATION
1	MACHINE TYPE	SQT-200/250 SERIES
2	MACHINE No.	
3	CNC TYPE	M640T
4	SPINDLE TYPE	
5	MILL SPINDLE	
6	PLC. 1 ROM No.	
7	AUX. 1 ROM No.	
8	AUX. 2 ROM No.	
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Remarks:

- *1 : add & alter '98.04.13 H.H
- *2 : add & alter '98.06.20 H.H
- *3 : add '98.08.04 H.H
- *4 : add GL FA I/F '98.08.27 T.K
- *5 : add & alter '98.10.19 H.H
- *6 : add & alter '98.12.10 H.H
- *7 : add & alter '99.03.10 H.H
- *8 : alter '99.07.29 R.M
- *9 : alter '99.08.27 H.H
- *10 : alter '99.09.22 H.H
- *11 : ADD GLF I/F '00.01.14 H.H
- *12 : ADD NETWORK I/F '00.04.22 M.K
- *13 : add & alter '00.05.19 M.K
- *14 : add & alter '00.08.25 M.K

Option:

No.	DRAWING NUMBER	TITLE
1	32000310014 *3*6*7*9*1	ELECTRIC CAPACITY LIST
2	32000310110 *3	M CODE LIST (1)
3	32000310120 *3	M CODE LIST (2)
4	32000310130 *3	M CODE LIST (3)
5	32000310140 *3	M CODE LIST (4)
6	32000310150 *3	M CODE LIST (5)
7	32000310161 *3*14	M CODE LIST (6)
8	32000310171 *3*14	M CODE LIST (7)
9	32000310181 *3*7	M CODE LIST (8)
10	32000310190 *3	M CODE LIST (9)
11	32000310200 *7	M CODE LIST (10)
12	32000312012 *3*6*7	MACHINE PARAMETER TIMER (1)
13	32000312022 *3*6*7	MACHINE PARAMETER TIMER (2)
14	32000312031 *3*7	PLC PARAMETER DATA (1)
15	32000312041 *3*7	PLC PARAMETER DATA (2)
16	32000312052 *3*6*7	PLC PARAMETER BIT (1)
17	32000312062 *3*7*9	PLC PARAMETER BIT (2)
18	32000312073 *3*6*7*14	PLC PARAMETER BIT (3)
19	32000312084 *3*6*7*9*14	PLC PARAMETER BIT (4)
20	32000312091 *9*14	PLC PARAMETER BIT (5)
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No.	DRAWING NUMBER	TITLE
26	32000317105 *3*6*7*9*11*12	PARTS ARAANGEMENT ON CONTROL BOX
27	32000317110 *3*7	PARTS ARAANGEMENT ON CONTROL BOX
28	32000317123 *3*6*7*11	PARTS ARAANGEMENT ON POWER PANEL
29	32000317133 *3*6*7*8*13	PARTS ARAANGEMENT ON RELAY PANEL
30	32000317143 *3*7*12*14	OPERATING PANEL
31	32000317150 *3*7	OPERATING PANEL PLC I/O ADDRESS
32	32000317160 *3*7	OPERATING PANEL BACK VIEW
33	32000317170 *3*7	PCB LAYOUT
34	32000317180 *3*7	REMOTE I/O UNIT LAYOUT(HEAD BOX)
35	32000317190 *3*7	REMOTE I/O UNIT LAYOUT(TURRET BOX)
36	32000317200 *3*7	REMOTE I/O UNIT LAYOUT(CONTROL BOX)
37	32000317210 *3*7	BASE I/O UNIT
38		
39	32000330213 *3*6*7*11	BLOCK LINE DRAWING 1(AC200V LINE)
40	32000330223 *3*6*7*11	BLOCK LINE DRAWING 2(AC200V LINE)
41	32000330232 *3*11*13	BLOCK LINE DRAWING(AC100V LINE)
42	32000330240 *3	CABLE DIAGRAM BUS LINE 1(2-AXIS, M)
43	32000330250 *3	CABLE DIAGRAM BUS LINE 2(2-AXIS, M)
44	32000330260 *3	CABLE DIAGRAM BUS LINE 3(MS. MY, MSY)
45	32000330270 *3	CABLE DIAGRAM BUS LINE 4(MS. MY, MSY)
46	32000330281 *3*11	REMOTE I/O CONNECTION
47	32000330290 *3	CABLE DIAGRAM(HEAD CONNECTION BOX)
48	32000330300 *3	CABLE DIAGRAM(TURRET, CARRIAGE BOX 1)
49	32000330310 *3	CABLE DIAGRAM(TURRET, CARRIAGE BOX 2)
50	32000330320 *3	CABLE DIAGRAM(TAIL BODY)
51	32000330331 *3*13	CABLE DIAGRAM(2nd. SPINDLE)
52	32000330340 *3	CABLE DIAGRAM(LEFT SIDE PLATE)
53	32000330350 *3	CABLE DIAGRAM(PCB COMMON→CEILING DUCT, SIDE PLATE)
54	32000330360 *3	CONTROL BOX LEFT SIDE PLATE
55	32000330370 *3	CABLE DIAGRAM(NC OERATING PANEL)
56	32000330380 *3	CABLE DIAGRAM(OPTION)
57	32000330393 *3*7*9*11	CABLE DIAGRAM(EX. TRANS.)
58	32000330400 *3*4	CABLE DIAGRAM GL FA I/F
59	32000330410 *11	CABLE DIAGRAM (M640T GL SPEC.)
60	32000330420 *11	CABLE DIAGRAM (M640T GL SPEC.)
61	32000330430 *13	CABLE DIAGRAM 5 (MS, MSY) SS 0.001° SPEC.
62	32000330440 *13	CABLE DIAGRAM 6 (MS, MSY) SS 0.001° SPEC.
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65	32000330450 *3*4	MACINE COMPONENTS LAYOUT(1)
66	32000330460 *3*4	MACINE COMPONENTS LAYOUT(2)
67	32000330472 *3*4*13	MACINE COMPONENTS LAYOUT(3)(SS SPEC.)
68	32000330480 *3*4	MACINE COMPONENTS LAYOUT(4)(Y AXIS SPEC.)
69	32000330490 *3*4	MACINE COMPONENTS LAYOUT(5)
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No.	DRAWING NUMBER	TITLE
71	32000340011 *6	LINE POWER SUPPLY
72	32000340023 *6*7*11	LINE POWER SUPPLY(EX. TRANS.)
73	32000340032 *6*7	POWER SUPPLY UNIT
74	32000340042 *6*7	POWER SUPPLY UNIT(CV-370 SPEC.)
75	32000340050	MAIN SPINDLE DRIVE
76	32000340061 *6	SPINDLE MOTOR COIL CHANGE
77	32000340070	MAIN SPINDLE FEED BACK(PLG SPEC.)(2-AXIS)
78	32000340080	MAIN SPINDLE FEED BACK 1(MP SCALE SPEC.)(M, MS, MY, MSY)
79	32000340090	MAIN SPINDLE FEED BACK 2(MP SCALE SPEC.)(M, MS, MY, MSY)
80	32000340101 *6	MAIN SPINDLE FEED BACK 3(MP SCALE SPEC.)(M, MS, MY, MSY)
81	32000340112 *1*2	SPINDLE FEED BACK(MP SCALE SPEC.)(MS, MSY)
82	32000340121 *7	MILL DRIVE(M, MS, MY, MSY TYPE)/SYNC. TAP)
83	32000340130	2nd SPINDLE MOTOR(MS, MSY)
84	32000340140	X-AXIS SERVO MOTOR
85	32000340150	X-AXIS SERVO MOTOR FEED BACK(MOTOR END)
86	32000340160	Z-AXIS SERVO MOTOR
87	32000340170	Z-AXIS SERVO MOTOR FEED BACK(MOTOR END)
88	32000340180	B-AXIS SERVO MOTOR
89	32000340190	B-AXIS SERVO MOTOR FEED BACK(MOTOR END)
90	32000340200	Y-AXIS SERVO MOTOR
91	32000340210	Y-AXIS SERVO MOTOR FEED BACK(MOTOR END)
92	32000340220	HYDRAULIC PUMP MOTOR
93	32000340233 *1*6*10	HEAD COOLING RADIATOR FAN MOTOR
94	32000340240	COOLANT PUMP MOTOR
95	32000340251 *2	CHIP CONVEYOR(OPTION)
96	32000340261 *2	AC100V/DC24V CONTROL
97	32000340272 *6*7	EMERGENCY STOP
98	32000340280	DC24V SUPPLY TO NC DI/O
99	32000340294 *2*5*6	REMOTE I/O COMMON LINE(1)
100	32000340303 *2*5	REMOTE I/O COMMON LINE(2)
101	32000340313 *2*5	REMOTE I/O COMMON LINE(MAC GL FA I/F SPEC.)
102	32000340323 *2*5	REMOTE I/O COMMON LINE(GL ADD AXIS SPEC.)
103	32000340330	FAN MOTOR
104	32000340340	SLIDEWAY LUBRICATING
105	32000340351 *1	HEAD COOLING PUMP MOTOR
106	32000340362 *2*7	TOOL EYE(OPTION)
107	32000340370	TOOL EYE(OPTION)
108	32000340380	WORK LIGHT
109	32000340391 *5	MAIN SPINDLE CHUCK
110	32000340401 *1	TAIL SLEEVE/BODY
111	32000340411 *2	TURRET SOLENOID/SENSOR
112	32000340420	PCB PC INPUT TURRET
113	32000340430	C-AXIS SOLENOID
114	32000340440	MAIN BRAKER SHUNT TRIP
115	32000340454 *2*5*6*7	ALARM CIRCUIT

No.	DRAWING NUMBER	TITLE
116	32000340460	PCB PC INPUT ALARM 24V CONFIRMATION
117	32000340472 *5*6	OPERATING BOX(1)
118	32000340480	OPERATING BOX(2)
119	32000340491 *2	FAN MOTORS for 2nd SPINDLE
120	32000340502 *1*5	2nd SPINDLE CHUCK
121	32000340510	2nd SPINDLE CHUCK PRESSURE SW. (OPTION)
122	32000340522 *1	OPTION SOLENOID(1)
123	32000340532 *1*2*9	OPTION SOLENOID(2)
124	32000340541 *2	AUTO PARTS CATCHER
125	32000340550	AIR PRESSURE SW.
126	32000340561 *1	AUTO DOOR(OPTION)
127	32000340571 *8	DOOR INTTER LOCK
128	32000340580	THERMOMETER ANALOG INPUT(3ch. TYPE)
129	32000340590	PCB PC INPUT(NOT USE)
130	32000340601 *8	PCB PC OUTPUT
131	32000340610	REMOTE I/O(HEAD) SPARE INPUT
132	32000340620	REMOTE I/O(TURRET) SPARE INPUT
133	32000340631 *9	REMOTE I/O(HEAD) SPARE OUTPUT
134	32000340640	REMOTE I/O(TURRET) SPARE OUTPUT(1)
135	32000340650	REMOTE I/O(TURRET) SPARE OUTPUT(2)
136	32000340661 *9	OPERATING BOX INPUT(1)
137	32000340670	OPERATING BOX INPUT(2)
138	32000340682 *7*8	OPERATING BOX INPUT(3)
139	32000340691 *7	OPERATING BOX OUTPUT
140	32000340700	IBDicator LIGHT(OPTION)
141	32000340711 *1	REVOLVING LIGHT(DC24V TYPE)(OPTION)
142	32000340721 *1	REVOLVING LIGHT(AC100V TYPE)(OPTION)
143	32000340731 *1	WARM UP (OPTION)
144	32000340741 *6	COOLANT CHILLER UNIT(OPTION)
145	32000340752 *1*7	MAGNUM COOLANT I/F(OPTION)
146	32000340761 *1	DRAW UP PUMP MOTOR(MAGNUM COOLANT OPTION)
147	32000340770	OIL SKIMER MOTOR(OPTION)
148	32000340781 *1	MIST COLLECTOR(OPTION)
149	32000340793 *2*7	MMS INTERFACE DIAGRAM
150	32000340800	BAR FEEDER I/F(OPTION)
151	32000340810	BAR FEEDER I/F(OPTION)
152	32000340820	IKURA BAR FEEDER I/F S TYPE(OPTION)
153	32000340830	IKURA BAR FEEDER I/F IBF-32VR TYPE(OPTION)
154	32000340840	IKURA BAR FEEDER I/F(OPTION)
155	32000340850	ALPUS BAR FEEDER I/F(OPTION)
156	32000340861 *6	ALPUS BAR FEEDER I/F(OPTION)
157	32000340870	GANTRY ROBOT I/F(OPTION)
158	32000340881 *5	PCB PC OUTPUT GL I/F(GL100C)
159	32000340890	PCB PC INPUT GL I/F(GL100C)
160	32000340900 *1	M55/SPINDLE COOLANT(OPTION)

No.	DRAWING NUMBER	TITLE
161	32000340910 *4	PCB PC OUTPUT GL I/F(GL100C FA TYPE)
162	32000340921 *4*6	PCB PC INPUT GL I/F(GL100C FA TYPE)
163	32000340930 *4	PCB PC INPUT GL I/F(GL100C FA TYPE)
164	32000340940 *12	NET WORK I/F
165	32000340950 *13	SPINDLE FEED BACK (MP SCALE SPEC.) MS, MSY SS 0.001° SPEC.
166	32000340960 *13	2nd. SPINDLE CHUCK SS 0.001° SPEC.
167	32000341010 *11	GL ROBOT I/F(M640T GL SPEC.)
168	32000341020 *11	AC100V/DV24V CONTROL (M640T GL SPEC.)
169	32000341030 *11	ALARM CIRCUIT (M640T GL SPEC.)
170	32000341040 *11	MAIN BREAKER SHUNT TRIP (M640T GL SPEC.)
171	32000341051 *11*14	EMERGENCY STOP (M640T GL SPEC.)
172	32000341081 *11*12	REMOTE OPERATING BOX (M640T GL SPEC.)
173	32000341090 *11	REMOTE I/O CONNECTION (M640T GL SPEC.)
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175	32000350013 *6*7*13	TERMINAL BLOCK(1)
176	32000350021 *14	TERMINAL BLOCK(2)
177	32000350210 *3	CONNECTOR TABLE
178	32000350220 *3	CONNECTOR TABLE(BAR FEEDER)
179	32000350230 *3	CONNECTOR(OPTION)
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LADDER DIAGRAM

Set No. *DL 320 LM C250*

SQT200/250 SERIES

SQT300 SERIES

Version: 320C2500

Date 2000.10.11