

Signals

Type	Tag Name	Description	Type	Voltage
	STEP_AXIS_X	Step pulses for X Axis	DC	24V
	DIR_AXIS_X	Direction signal for X Axis	DC	24V
	STEP_AXIS_Y	Step pulses for Y Axis	DC	24V
	DIR_AXIS_Y	Direction signal for Y Axis	DC	24V
	STEP_AXIS_Z	Step pulses for Z Axis	DC	24V
	DIR_AXIS_Z	Direction signal for Z Axis	DC	24V
	STEP_AXIS_A	Step pulses for A Axis	DC	24V
	DIR_AXIS_A	Direction signal for A Axis	DC	24V
	BRAKE_Z	Z Axis Brake signal	DC	24V
	LIMIT_MIN_X	Limit switch for X Axis minimum travel	DC	24V
	LIMIT_MIN_Y	Limit switch for Y Axis minimum travel	DC	24V
	LIMIT_MIN_Z	Limit switch for Z Axis minimum travel	DC	24V
	LIMIT_MAX_X	Limit switch for X Axis maximum travel	DC	24V
	LIMIT_MAX_Y	Limit switch for Y Axis maximum travel	DC	24V
	LIMIT_MAX_Z	Limit switch for Z Axis maximum travel	DC	24V
	E_STOP	Emergency Stop Signal	DC	24V
	SPINDLE_ON	Spindle On/Off	DC	24V
	COOLANT_ON	Coolant On/Off	DC	24V
	AIR_ON	Compressed Air On/Off	DC	24V

Components

Circuit Breaker 60A	CB60
Filter Rated 16A Z	LF16Z
Filter Fused 10A X	LF10X
Filter Fused 10A Y	LF10Y
Filter Fused 1A X	LF01X
Filter Fused 1A Y	LF01Y
Filter Fused 1A Z	LF01Z
Fuse 16A Z	FB16Z
Term Block 1 60A	TB1
Contactor 10A X	CTX
Contactor 10A Y	CTY
Contactor 18A Z	CTZ
Mesa 7i76e	MSA76
Mesa 7i89	MSA89
Meanwell 24V 6.5A 1	DCP1
Meanwell 24V 6.5A 2	DCP2
DYN4-H X	DRVX
DYN4-H Y	DRVY
DYN4-T Z	DRVZ
Leadshine DM332T	DRVA
Relay E-stop	RLYES
Relay Z Brake	RLYZBR
Relay E-stop lamp	RLYESL
Term Block 2 Red 5A	TB2
240V Power Cord	CORD
Z-Axis Brake	ZBR

Wires

#	Component Start	Terminal Start	Component End	Terminal End	Color	Cable	Signal	Gauge	Amps	Voltage
2	CB60	OL	TB1	20	BK			8	40	230AC
1	CB60	OR	TB1	10	BK			8	40	230AC
	CORD	K	CB60	IL	BK			8	40	230AC
	CORD	W	CB60	IR	W			8	40	230AC
7	TB1	11	LF16Z	IR	BK			14	15	230AC
9	TB1	13	LF10X	IR	BK			16	10	230AC
8	TB1	15	LF10Y	IR	BK			16	10	230AC
12	TB1	17	DCP1	N	BK			16	1.7	230AC
13	TB1	19	DCP2	N	BK			16	1.7	230AC
3	TB1	2	FB16Z	I	BK			14	15	230AC
4	FB16Z	O	LF16Z	IL	BK			14	15	230AC
5	TB1	3	LF10X	IL	BK			16	10	230AC
6	TB1	1	LF10Y	IL	BK			16	10	230AC
10	TB1	5	DCP1	L	BK			16	1.7	230AC
11	TB1	7	DCP2	L	BK			16	1.7	230AC
14	LF16Z	OL	CTZ	IR	BK			14	15	230AC
15	LF16Z	OR	CTZ	IL	BK			14	15	230AC
18	LF10X	OL	CTX	IR	BK			16	10	230AC
19	LF10X	OR	CTX	IL	BK			16	10	230AC
16	LF10Y	OL	CTY	IL	BK			16	10	230AC
17	LF10Y	OR	CTY	IM	BK			16	10	230AC
20	CTZ	OL	DRVZ	T4-R	BK			14	15	230AC
21	CTZ	OR	DRVZ	T4-S	BK			14	15	230AC
22	LF01Z	OR	DRVZ	T4-L1	BK			22	1	230AC
23	LF01Z	OL	DRVZ	T4-L2	BK			22	1	230AC
24	CTZ	OL	LF01Z	IL	BK			14	1	230AC
25	CTZ	OR	LF01Z	IR	BK			14	1	230AC
26	CTY	OL	DRVY	T4-R	BK			16	10	230AC
27	CTY	OR	DRVY	T4-S	BK			16	10	230AC
28	LF01Y	OR	DRVY	T4-L1	BK			22	1	230AC
29	LF01Y	OL	DRVY	T4-L2	BK			22	1	230AC
30	CTY	OL	LF01Y	IL	BK			16	1	230AC
31	CTY	OR	LF01Y	IR	BK			16	1	230AC
32	CTX	OL	DRVX	T4-R	BK			16	10	230AC
33	CTX	OR	DRVX	T4-S	BK			16	10	230AC
34	LF01X	OR	DRVX	T4-L1	BK			22	1	230AC
35	LF01X	OL	DRVX	T4-L2	Bk			22	1	230AC
36	CTX	OL	LF01X	IL	Bk			16	1	230AC
37	CTX	OR	LF01X	IR	Bk			16	1	230AC
	DCP1	O+	TB2	L1	Red			22		24DC
	DCP1	O-	TB2	L3	Black			22		24DC
	DCP2	O+	TB2	L5	Red			22		24DC
	DCP2	O-	TB2	L10	Black			22		24DC

Terminal Blocks

Terminal Block 1

Wire #			Wire #
3	2	1	6
	4	3	5
	6	5	10
	8	7	11
1	10	9	
	12	11	7
	14	13	9
	16	15	8
	18	17	12
2	20	19	13

Terminal Block 2

Wire #			Wire #
	2	1	
	4	3	
	6	5	
	8	7	
	10	9	
	12	11	
	14	13	
	16	15	
	18	17	
	20	19	
	22	21	
	24	23	
	26	25	
	28	27	
	30	29	
	32	31	
	34	33	
	36	35	
	38	37	
	40	39	
	42	41	
	44	43	
	46	45	
	48	47	
	50	49	
	52	51	
	54	53	
	56	55	
	58	57	
	60	59	
	62	61	
	64	63	