

**Wiring GA500 Inverter in place of any previous inverter:**

The numbers & letters in the columns below represent terminal designations for the various inverter drives we have used from 1990 through 2020 To install your new GA00 drive, remove each wire from your old drive, label it with the terminal designation, and connect it to the corresponding terminal on the GA500 drive. Pages 2 & 3 illustrate wiring for **TB1**; pages 4 &5 for **PCB**. The TB1 was used until about late 2011

Mitsbshi Terminal	S300 Terminal	PC3 Terminal	GPD315 Terminal	V1000 Terminal	<b>GA500</b> Terminal
R	L1	L1	L1	L1	L1
S	L2	L2	L2	L2	L2
T	L3	L2	L3	L3	L3
U	T1	T1	T1	T1	T1
V	T2	T2	T2	T2	T2
W	T3	T3	T3	T3	T3
B	2	FB	MB	MB	MB
C	3	FC	MC	MC	MC
STF	5	1	S1	S1	S1
STR	6	2	S2	S2	S2
SD	4	6	SC	SC	<b>SN</b>
SD	10	6	SC	SC	<b>SN</b>
RES	9	3	S4	S4	S4
5	13	11	FC	AC	AC
2	14	8	FR	A1	A1
P	??	B1*	B1	B1	B1
PR	??	B2*	B2	B2	B2

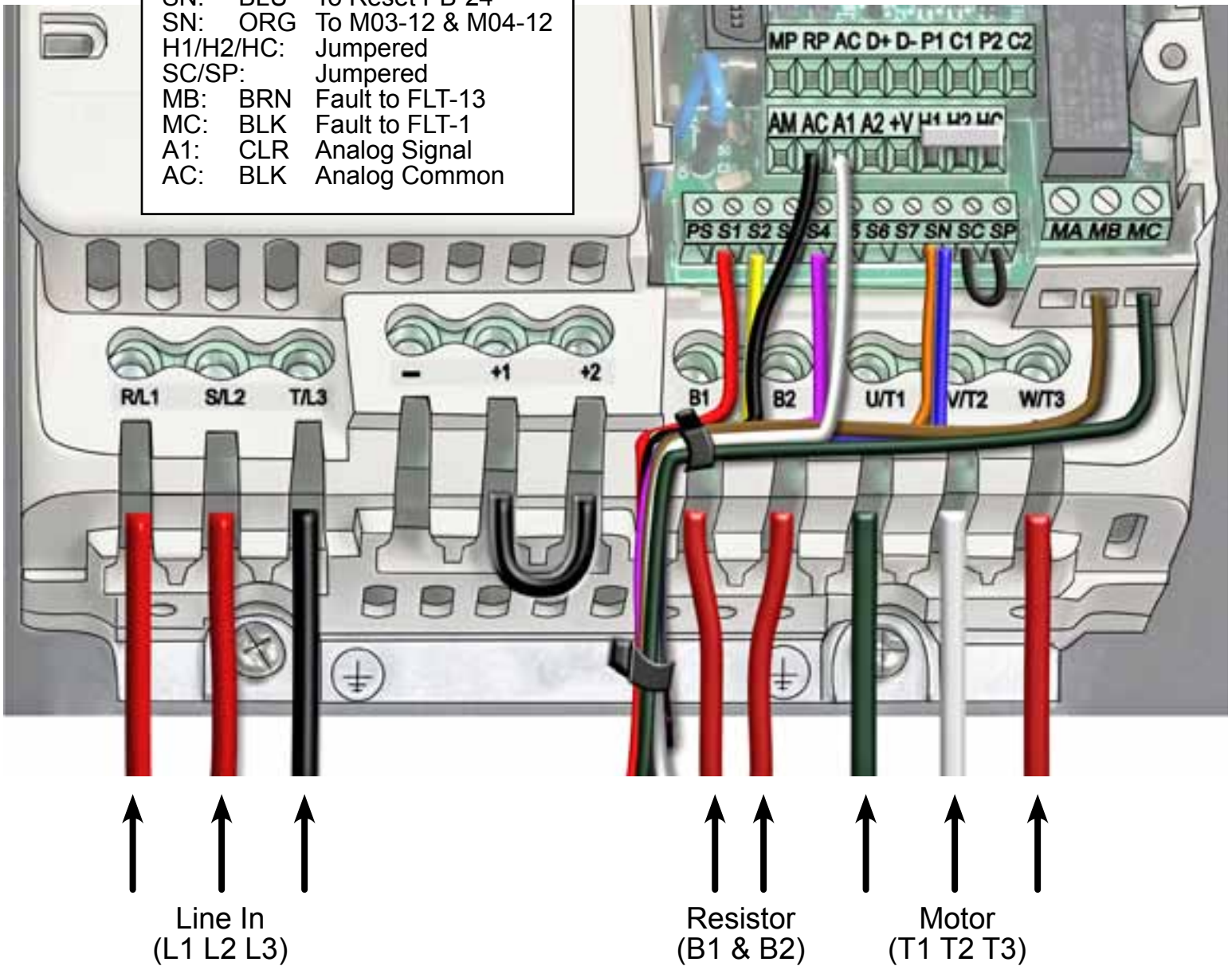
\*PC3: 14ga wire from these terminals to the external braking resistor On some older installations, wires were soldered directly to the internal braking resistor on the Justspeed S300. Sometimes these went to a two- station terminal block, sometimes they went directly to a braking resistor in a perforated box outside the cabinet. If your existing resistor looks ok, just snip the wires and insure that the resistor is connected to B1& B2 on new drive, either directly, or via the two-station terminal block.

# Yaskawa GA500 5HP Spindle Drive Wiring

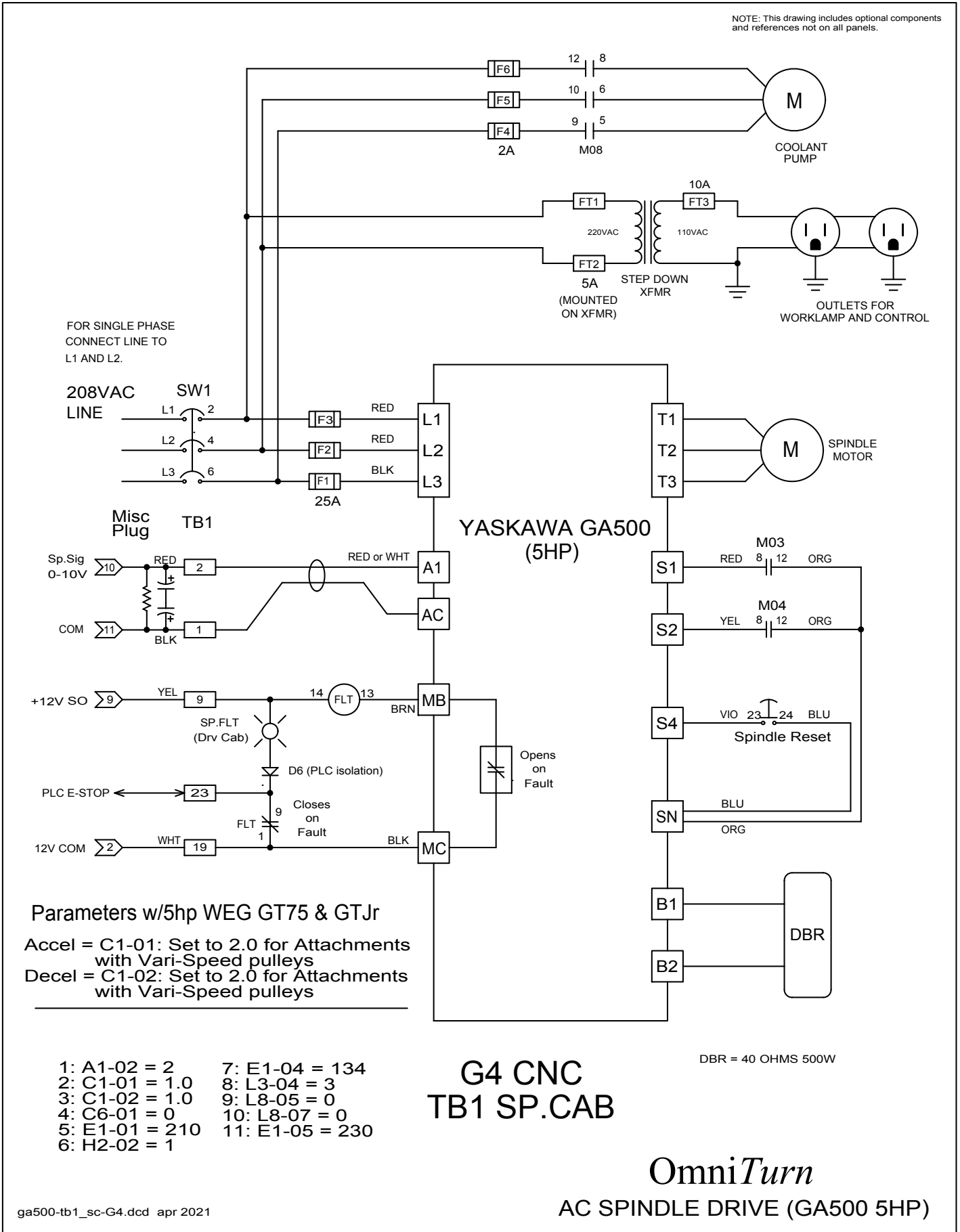
## TB1 WIRING

S1:	RED	To M03-8
S2:	YEL	To M04-8
S4:	VIO	To Reset PB-23
SN:	BLU	To Reset PB-24
SN:	ORG	To M03-12 & M04-12
H1/H2/HC:		Jumpered
SC/SP:		Jumpered
MB:	BRN	Fault to FLT-13
MC:	BLK	Fault to FLT-1
A1:	CLR	Analog Signal
AC:	BLK	Analog Common

## TB1 WIRING



NOTE: This drawing includes optional components and references not on all panels.



- 1: A1-02 = 2
- 2: C1-01 = 1.0
- 3: C1-02 = 1.0
- 4: C6-01 = 0
- 5: E1-01 = 210
- 6: H2-02 = 1
- 7: E1-04 = 134
- 8: L3-04 = 3
- 9: L8-05 = 0
- 10: L8-07 = 0
- 11: E1-05 = 230

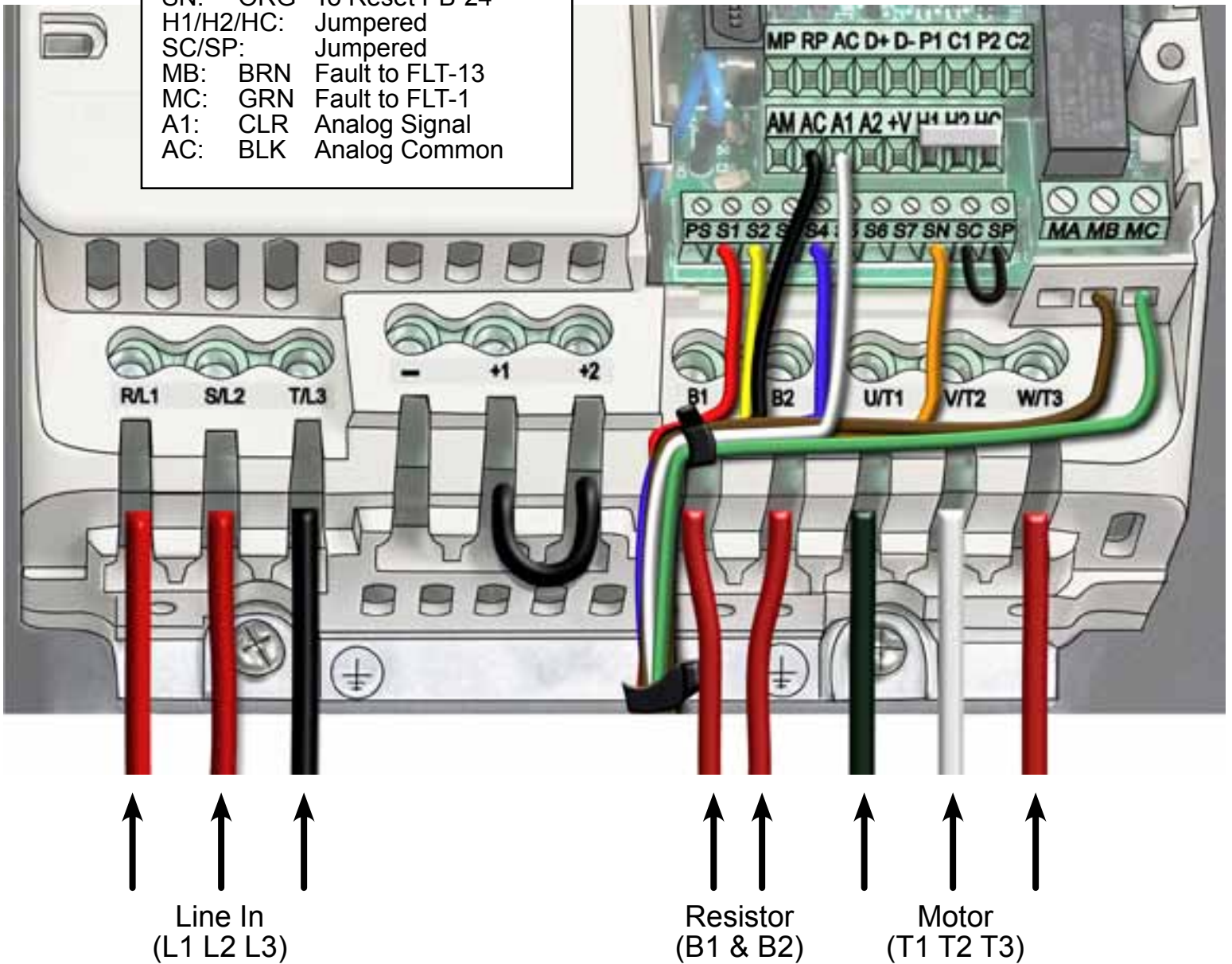
ga500-tb1\_sc-G4.dcd apr 2021

# Yaskawa GA500 5HP Spindle Drive Wiring

## PCB WIRING

S1:	RED	To M03-8
S2:	YEL	To M04-8
S4:	BLU	To Reset PB-23
SN:	ORG	To Reset PB-24
H1/H2/HC:		Jumpered
SC/SP:		Jumpered
MB:	BRN	Fault to FLT-13
MC:	GRN	Fault to FLT-1
A1:	CLR	Analog Signal
AC:	BLK	Analog Common

## PCB WIRING



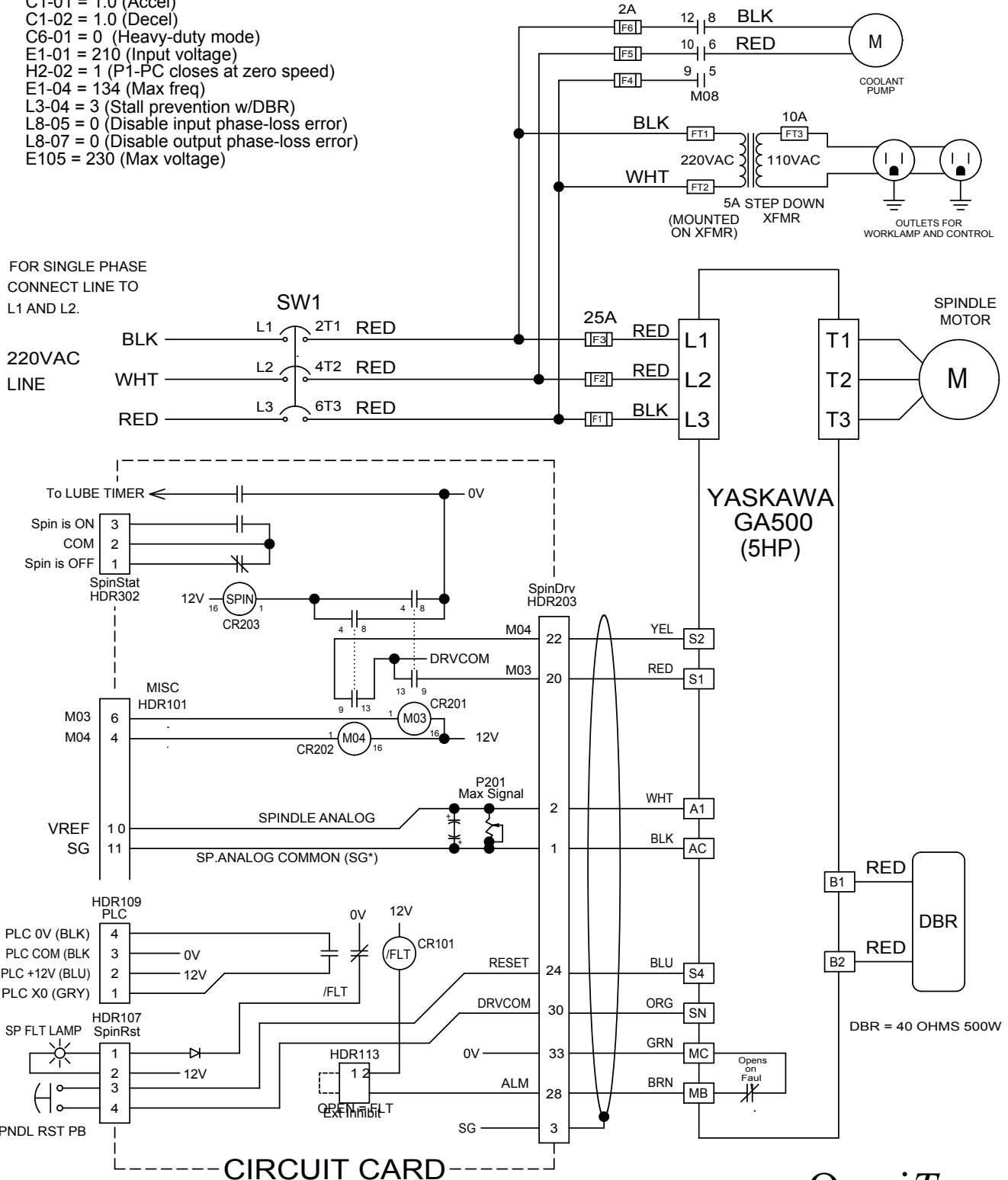
**Parameters w/5hp WEG GT75 & GTJr**

To re-initialize: set A1-03 to 2220  
After initialization set as follows:

- A1-02 = 2 (Open loop vector mode)
- C1-01 = 1.0 (Accel)
- C1-02 = 1.0 (Decel)
- C6-01 = 0 (Heavy-duty mode)
- E1-01 = 210 (Input voltage)
- H2-02 = 1 (P1-PC closes at zero speed)
- E1-04 = 134 (Max freq)
- L3-04 = 3 (Stall prevention w/DBR)
- L8-05 = 0 (Disable input phase-loss error)
- L8-07 = 0 (Disable output phase-loss error)
- E105 = 230 (Max voltage)

FOR SINGLE PHASE  
CONNECT LINE TO  
L1 AND L2.

220VAC  
LINE



ga500\_sc-G4\_pwb.dcd jan 2021

**OmniTurn**  
INVERTER SPINDLE DRIVE w/CCA