Title: ACORN_rev3, YASKAWA SIGMA5 SERVO DRIVE

Date: 180426 | Ver: 5 | Drawn by: CEM

Filename: S14896.DWG | Sheet 1 of 1

How to tell the difference between Acorn_rev2 and Acorn_rev3
Acorn_rev2 has FIXED green screw terminal blocks
Acorn_rev3 has REMOVABLE green screw terminal blocks

E-STOP CONTACTOR

COIL POWER/ACN

A1 COIL A2

MOTOR POWER

L3 T3
L2 T2
L1 T1

E-STOP SWITCH (NORMALLY CLOSED)

E-STOP SIGNAL

/ALM-RST: PIN 44
/S-ON: PIN 40
/SIGN: PIN 12
/PULS: PIN 8
ALM+: PIN 31

ALARM RESET

SGDV-

CN5
CN3
CN7
CN1
CN8
CN2

L1
L2
L3
L1C
L2C
B1 /⊕
B2
B3
⊖ 1
⊖ 2

TO MOTOR/U
TO MOTOR/V
TO MOTOR/W
TO MOTOR/FG

U
V
W

G G

CHASIS GROUND

MOTOR ENCODER CABLE

CONTROL CABLE

COM
+24VDC

/ALM-RST: PIN 44
/S-ON: PIN 40
/SIGN: PIN 12
/PULS: PIN 8
ALM+: PIN 31
ALM-: PIN 32
+24VIN: PIN 47
SIGN: PIN 11
PULS: PIN 7

2.2K OHMS RESISTORS

H1: IN5 IN6 IN7 IN8 24 IN

H2: ST1 DR1 EN1 COM ST2 DR2 EN2 COM

H3: ST3 DR3 EN3 COM ST4 DR4 EN4 COM

H4: 24 IN, IN4, IN3, IN2, IN1

H5: COM OC8 OC7 COM OC6 OC5 COM OC4 OC3

H6: COM, Input 4, Input 3, Input 2, Input 1, Direction 4, Step 4, Direction 3, Step 3, Direction 2, Step 2, Direction 1, Step 1, Output 1, Output 4, Output 3, Input 5, Output 2, Chassis GND

P10
PIN 9 = +5VDC
PIN 8 = B
PIN 7 = A
PIN 6 = Z
PIN 5 = B\
PIN 4 = A\
PIN 3 = Z\
PIN 2 = COM
PIN 1 = N/C

H7: NC2 NO2 RL2 NC1 NO1 RL1

OUT2
OUT1

H8: AN GND AN OUT

H9: CHASSIS COM COM +24VDC +24VDC

ETHERNET

FROM SPINDLE ENCODER

ACORN
REV 180322
PN:14445

ADAPT8RLY REV 180820
GND RY1 RY2 RY3 RY4 RY5 RY6 RY7 RY8 5V
5V

5VDC NPN RELAY BOARD
GND IN1 IN2 IN3 IN4 IN5 IN6 IN7 IN8 VCC
GND VCC JD-VCC
OUT8 OUT7 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8
COM

ALARM RESET

E-STOP COIL POWER/ACH

COM
+24VDC

SHIELDED ETHERNET CABLE FROM PC

110VAC
BLK
WHT
GRN

MEANWELL RD-35B
L
N
V2 (+24 VDC) 1.0A
COM
V1 (+5 VDC) 2.2A

GRN
YEL
BLK
RED

Refer to Tech Bulletin TB297 for Drive Setup and Tuning.

E-STOP CIRCUITS ARE RED
OPTIONAL CONNECTIONS ARE BLUE
GROUNDS ARE GREEN
110VAC IS VIOLET