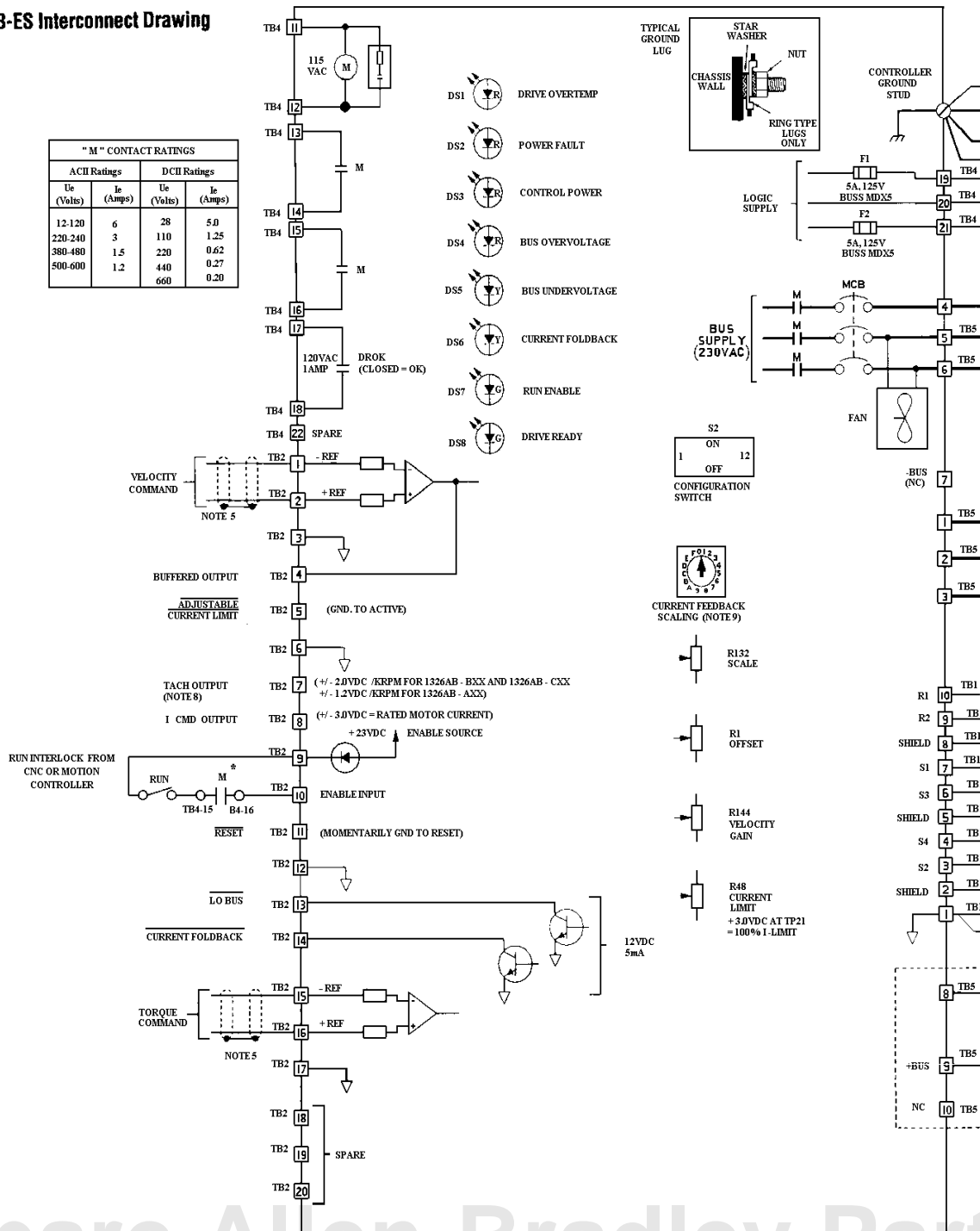


1391B-ES Interconnect Drawing

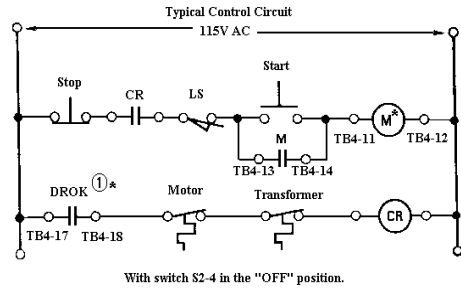
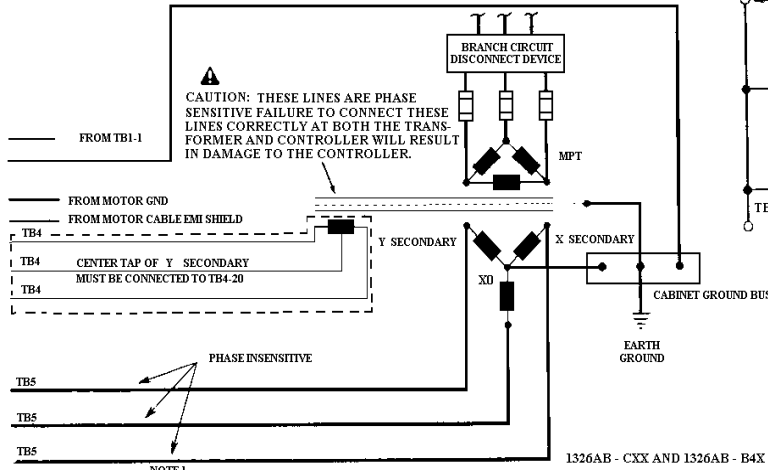
"M" CONTACT RATINGS			
ACII Ratings		DCII Ratings	
U <sub>e</sub> (Volts)	I <sub>e</sub> (Amps)	U <sub>e</sub> (Volts)	I <sub>e</sub> (Amps)
12-120	6	28	5.0
220-240	3	110	1.25
380-480	1.5	220	0.62
500-600	1.2	440	0.27
		660	0.20



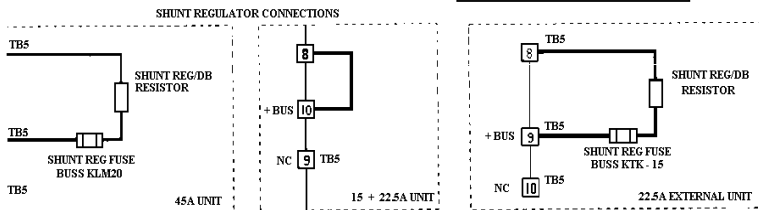
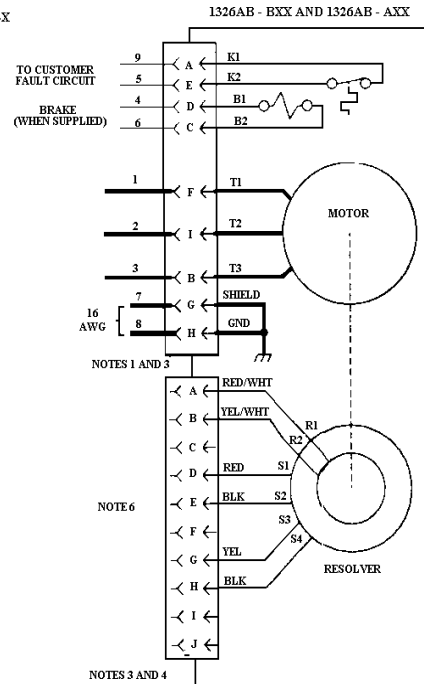
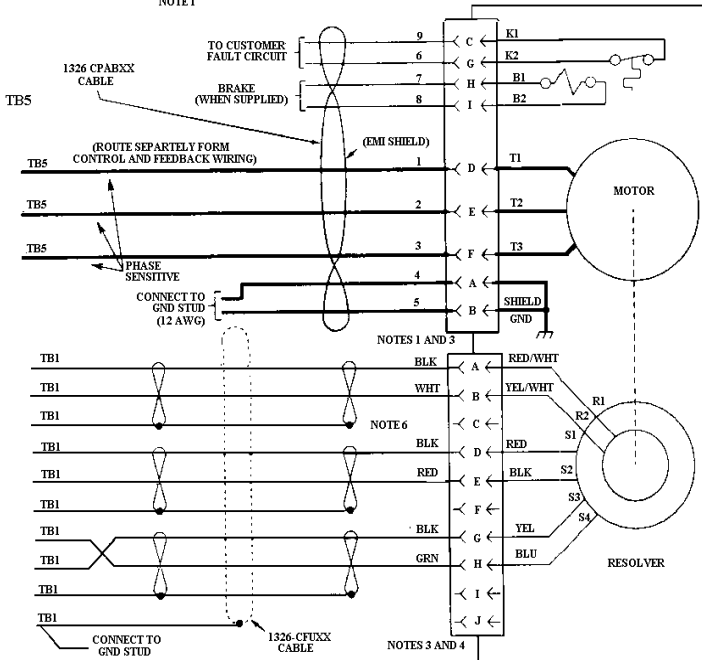
\* INDICATES COMPONENTS LOCATED IN 1391 CONTROLLER

### 1391 ES CONNECTION GUIDE

#### 1391B-ES Interconnect Drawing

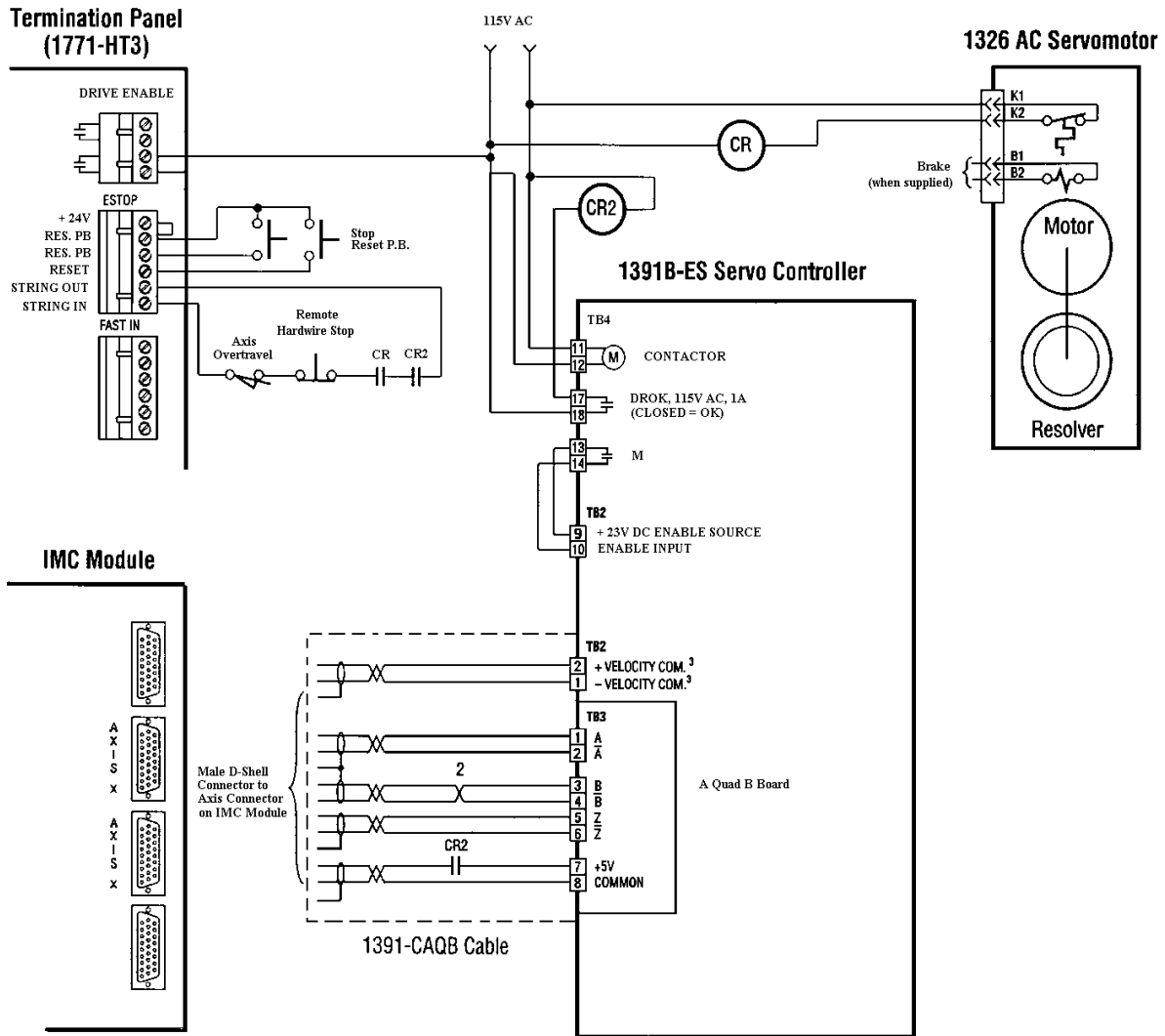


**IMPORTANT:**  
THE THERMAL SWITCH AND BRAKE WIRES ARE ROUTED NEAR MOTOR POWER AND CAN PICK UP PWM RADIATION. ISOLATION FROM CONTROL DEVICES MAY BE REQUIRED.



\* INDICATES COMPONENTS LOCATED IN 1391 CONTROLLER

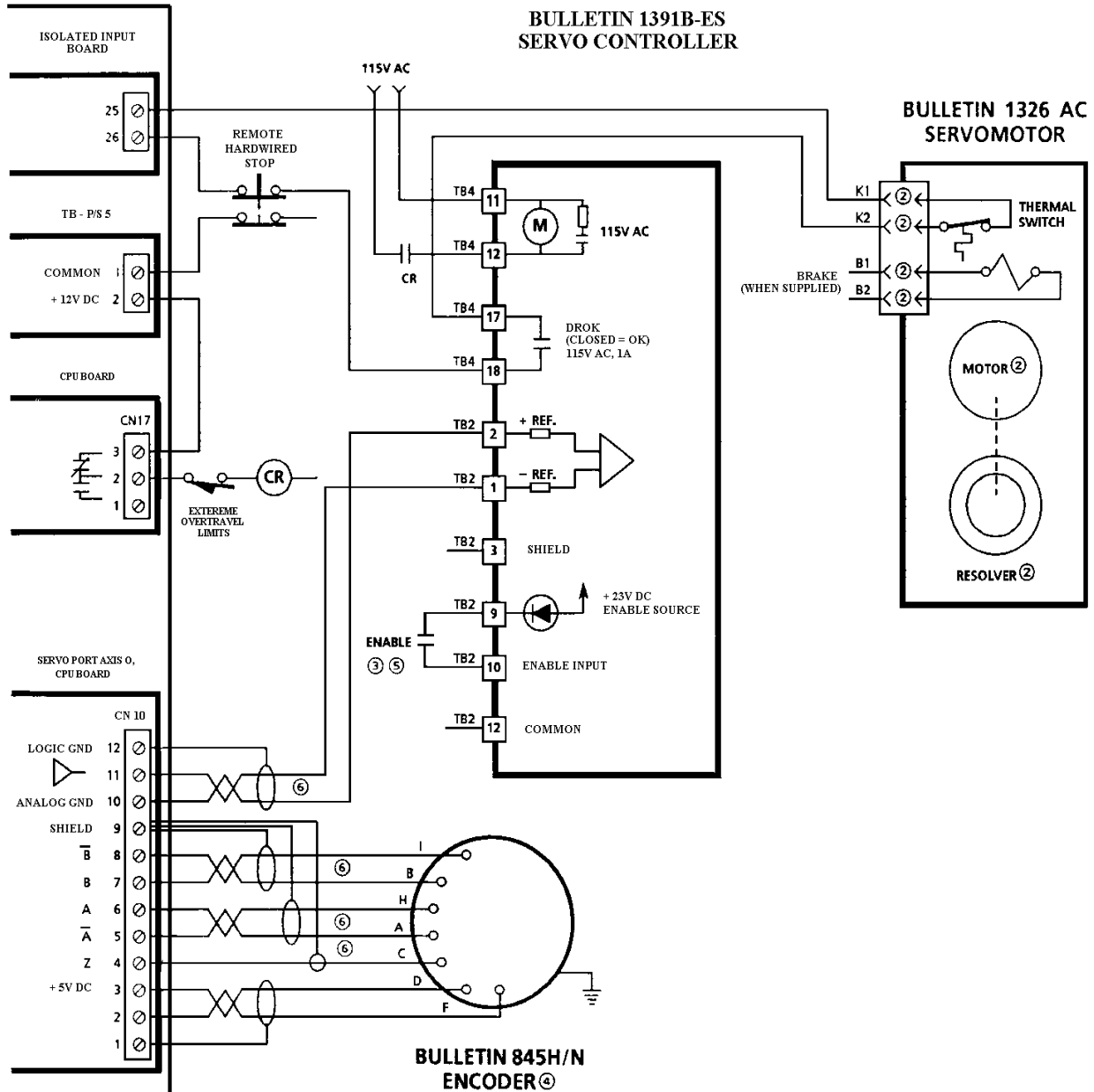
1391B-ES W/ IMC 120/123



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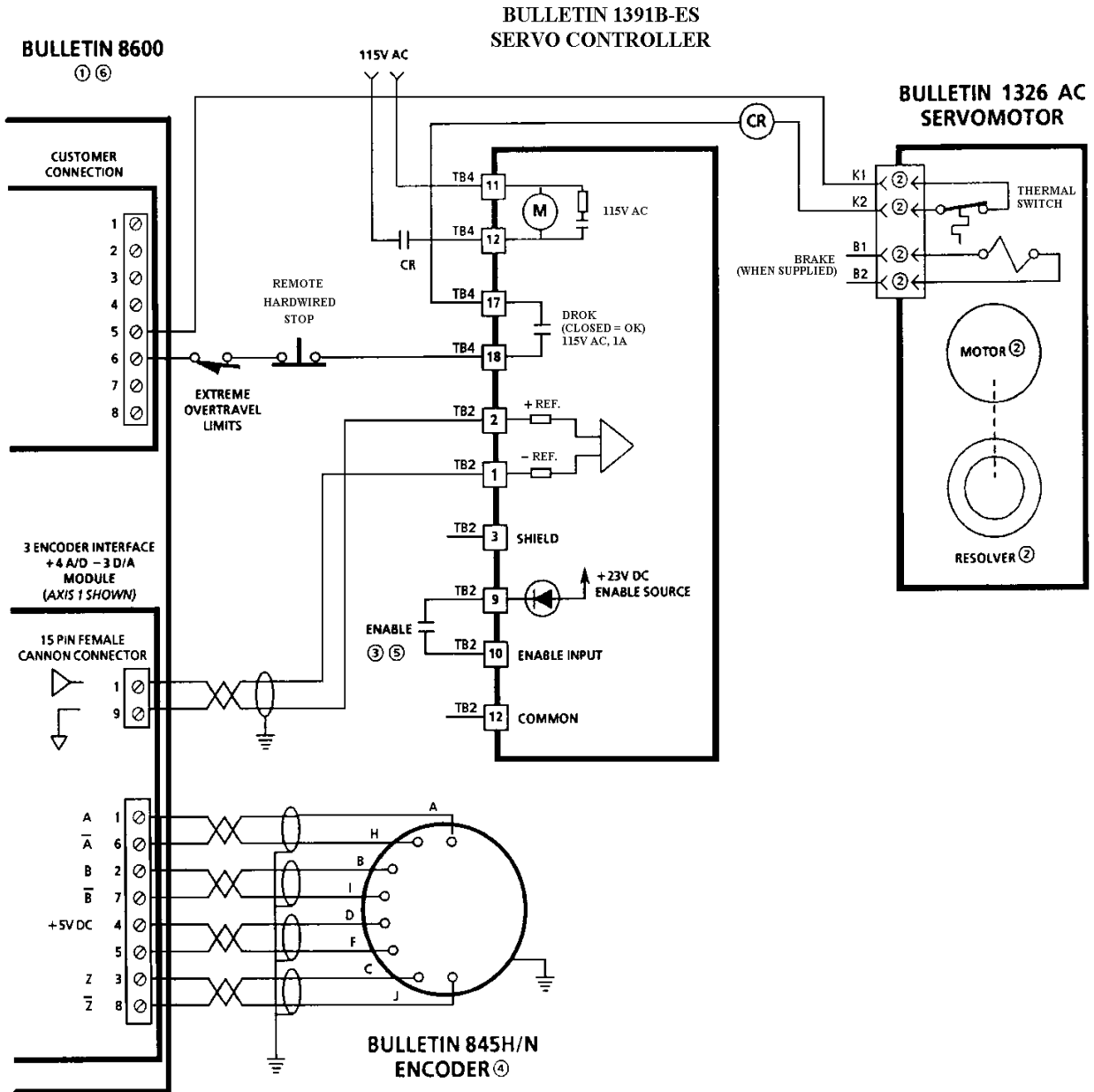
**TYPICAL 8400 INTERCONNECT DIAGRAM**

BULLETIN 8400 ①



- ① REFER TO A-B PUBLICATION 8400-4.1, SERIES 8400 CNC INTERFACE DESIGN MANUAL FOR DETAILS.
- ② REFER TO THE BULLETIN 1391B-ES INTERCONNECT DRAWING FOR DETAILS ON THE FOLLOWING:  
 • MOTOR/ RESOLVER CONNECTIONS • CONNECTOR DESIGNATIONS • CABLES • SHIELDS AND ROUNDING
- ③ ENABLE RELAY IS SHOWN AS TYPICAL ONLY. BULLETIN 1391B-ES CAN BE ENABLED WITHOUT AN EXTERNAL RELAY.
- ④ TYPICAL DIFFERENTIAL LINE DRIVER OUTPUT.
- ⑤ A-B CATALOG NUMBER 700-HC14Z12 (RELAY) AND 700-HN103 (MOUNTED BASE).
- ⑥ BELDEN 9730 OR EQUIVALENT, 50 FEET (15.2 METERS) MAXIMUM, SHIELDS GROUNDED AT CONTROL ONLY.

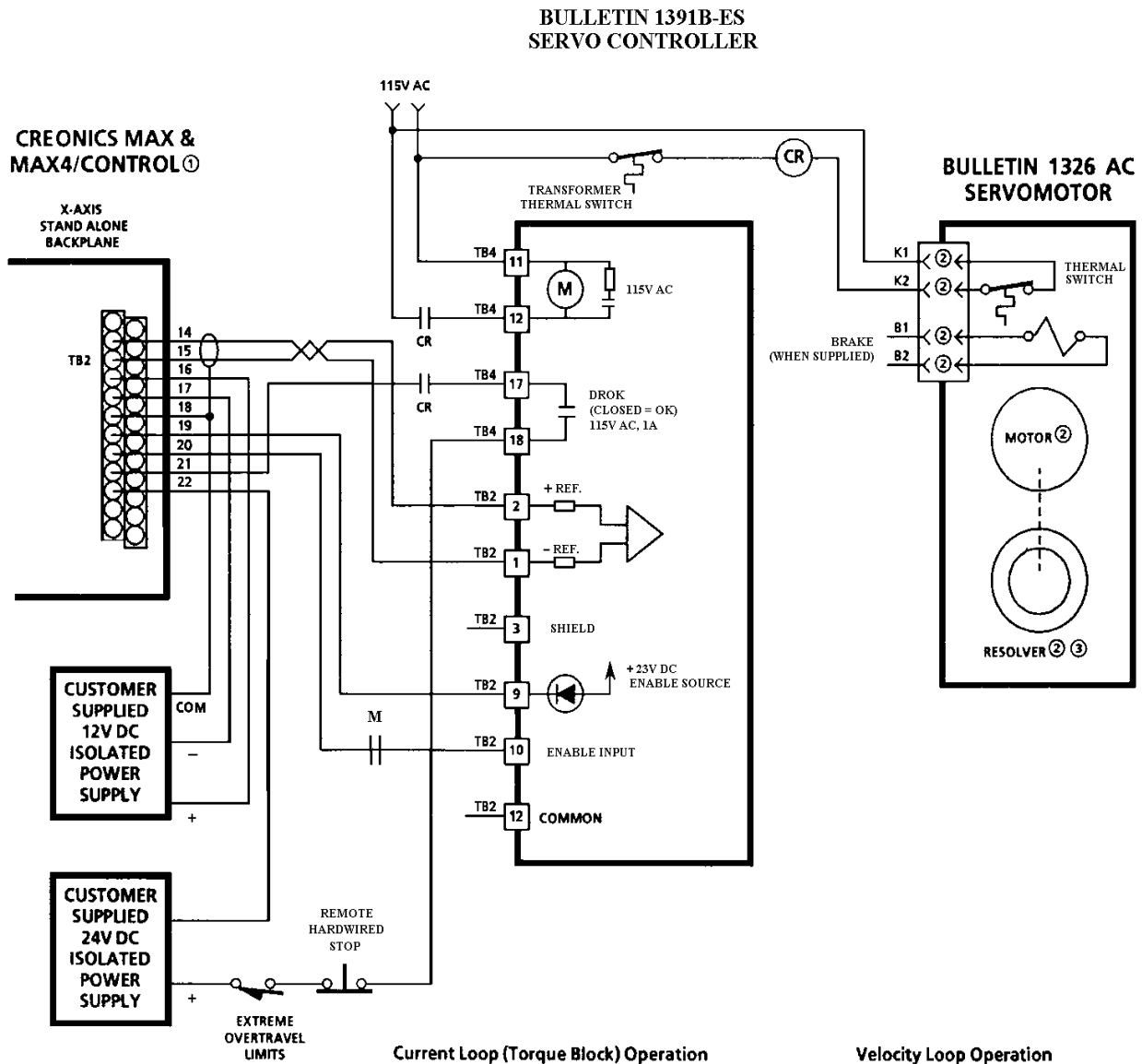
**TYPICAL 8600 INTERCONNECT DIAGRAM**



- ① REFER TO A-B PUBLICATION 8600-4.1 SERIES 8600 CNC INTERFACE DESIGN MANUAL FOR DETAILS
- ② REFER TO THE BULLETIN 1391B-ES INTERCONNECT DRAWING FOR DETAILS ON THE FOLLOWING:  
 • MOTOR/ RESOLVER CONNECTIONS • CONNECTOR DESIGNATIONS • CABLES • SHIELDS AND GROUNDING
- ③ ENABLE RELAY IS SHOWN AS TYPICAL ONLY. BULLETIN 1391B-ES CAN BE ENABLED WITHOUT AN EXTERNAL RELAY.
- ④ TYPICALLY DIFFERENTIAL LINE DRIVER OUTPUT.
- ⑤ A-B CATALOG NUMBER 700-HC14Z12 (RELAY) AND 700-HN103 (MOUNTED BASE).
- ⑥ TYPICAL 3 AXIS SYSTEM SHOWN FOR 8605, 8610 AND 8650 CNC.

**Allen - Bradley**

**CREONICS MAX & MAX4/CONTROL INTERCONNECT DIAGRAM**



**Current Loop (Torque Block) Operation**

Jumper/Parameter	Setting
1391 Jumper P5	IN
1391 Jumper P7	iN
1391 TP18 to TP19	IN
MAX4/CONTROL "Servo Amplifier Type" Parameter	PWM/Current

**Velocity Loop Operation**

Jumper/Parameter	Setting
1391 Jumper P5	OUT
1391 Jumper P7	OUT
1391 TP18 to TP19	OUT
MAX4/CONTROL "Servo Amplifier Type" Parameter	Velocity

① REFER TO THE MAX OR MAX4/CONTROL INSTALLATION AND SETUP MANUAL FOR DETAILS.

② REFER TO THE BULLETIN 1391B-ES INTERCONNECT DRAWINGS FOR DETAILS ON THE FOLLOWING:  
 • MOTOR/RESOLVER CONNECTIONS • CONNECTOR DESIGNATIONS • CABLES • SHIELDS AND GROUNDING

③ ENCODER IS REQUIRED FOR CONNECTIONS TO THE MAX AND MAX4. REFER TO THE MAX OR MAX4 MANUAL FOR CONNECTIONS DETAILS.