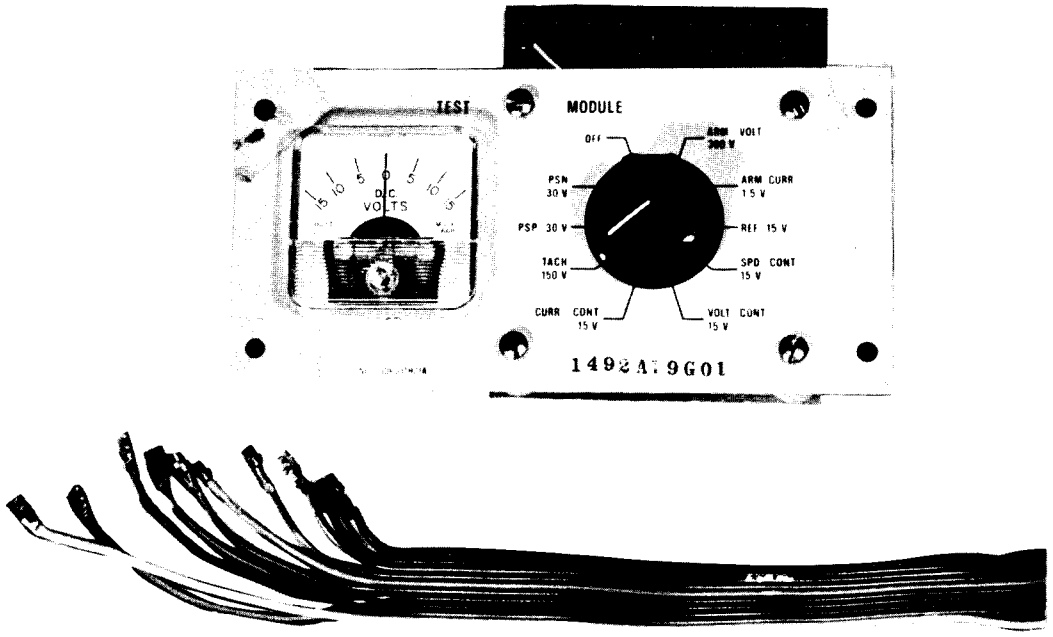
Westinghouse

22-1000
Adjustable Speed Drives



INSTALLATION INSTRUCTION FOR A
TEST MODULE KIT FOR 22-1000 DRIVES
I. L. 22-1000-19

Westinghouse Electric Corporation

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22-1000 3 PHASE TEST MODULE KIT

S#1492A19G01

The test module kit, when properly installed enables the sensing of nine test points within a 22-1000 3-phase drive. The module meter is a zero-centered meter to provide signals with associated signal polarity, positive signals showing deflection to the right of center and negative signals showing deflection to the left of center.

The module faceplate identifies each of the nine test positions by signal identity and also full-scale calibration of the meter. Table 1 is a tabulation of test points, signal identity and signal designation.

Specifications and Ratings of CB

Input Voltage (U.V. W) 230 VAC, 3 phase 60 HZ ± 10%

DESCRIPTION	CONTROLLER DESIGNATION	TESTER DESIGNATION	BOARD VOLTAGES	ON SITE READINGS
Armature Voltage	$-V_b$ to TP	$-V_b$ to TP	0 to -300 VDC	
Armature Current	$-I_a$ to PSC	$-I_a$ to PSC	-0.5 VDC at FLA Nom	
Input Reference	RIN to PSC	$-V_r$ to PSC	0 to 8 VDC	
Speed Controller Output	OUT-1 to PSC	V_{so} to PSC	-0.5 to +10VDC	
Voltage Controller Output	OUT-2 to PSC	$-V_{vo}$ to PSC	+0.5 to -10VDC	
Current Controller Output	OUT-3 to PSC	$-V_{io}$ to PSC	+0.5 to -10VDC	
Tach Feedback	TR to PSC	V_t to PSC	0 to 150 VDC	
Power Supply Positive	PSP to PSC	PSP to PSC	+25 VDC Nominal	
Power Supply Negative	PSN to PSC	PSN to PSC	-25 VDC Nominal	
Gating Reference	E-OUT to PSC	Not Available	0 to -10 VDC	

Following installation of the test module, it is suggested that when the drive has been placed in normal operation that the column "ON SITE READINGS" (of table 1) be filled in to provide a normal reference level for the nine test points for future reference. Select an operating condition that can be readily duplicated for future comparison.

Test Module Kit S#1492A19G03 Consists of the following:

1. Test module assembly S#1492A19G01 (1)
2. Nylon spacers for insulated - standoff mounting of module S#487B382H01 (4)
3. .164-32 X 2in. fil. stl. mach. scr. (4)
4. Wiring color coded harness S#491B657G01 (1)
5. Tie straps S#472A099H01 (3)
6. Instruction Leafet I.L. 22-1000-19

All of above package within a carton.

Check to see that all listed items have been received, if shortage exists contact the nearest Westinghouse representative.

INSTALLATION INSTRUCTIONS

The module is to be mounted at the bottom of the cabinet as shown in Figures 1 and 2. Figure 1 shows the mounting location when the test module is to be mounted in the 5 to 7-1/2HP drives and Figure 2 shows mounting location when the test module is to be mounted in the 10 through 40 HP drives.

Nylon spacers, S#487B382H01 (4), provide insulated mounting for the module whether mounted as shown in Figure 1 or Figure 2. Always use these insulated nylon spacers when mounting the test module.

1. Mounting Instructions Reference Figure 1 & 2.

1.1 Insert the (4) four Nylon spacers, S#487B382H01, into the (4) square mounting holes in either the panel or the heat sink, provided for the mounting of the test module.

1.2 Using the (4) four .164-32 X 2in. fil. stl. machine screws, mount the test module securely to the Nylon spacers.

1.3 The module is now mechanically mounted.

2. Electrical Installation

The color coded harness, S#491B382H01, has 10 leads and is designed to provide complete interwiring between the test module and the ten (10) test points on the controller and Gate printed circuit Board (CB). All connections on the test module and CB, are "push-on" type, and are connected to the identified lance type terminals.

Figure 3 shows the harness connected and the approximate location of all test points on the test module and CB.

2.1 Connections on test module

One end of the harness has all 10 leads grouped tightly together with approximately the same lead length. This end of the harness connects to the 10 lance terminals on the top of the test module. Using the push-on connectors on the ends of all wires in the harness make the following connections at the test module.

2.1.1 Push the connector on the White lead on lance terminal marked (PSC1).

2.1.2 Push the connector on the Blue lead on lance terminal marked (-Vio).

2.1.3 Push the connector on the Red lead on lance terminal marked (Vt).

2.1.4 Push the connector on the Gray lead on lance terminal marked (PSN).

2.1.5 Push the connector on the Violet lead on lance terminal marked (PSP).

2.1.6 Push the connector on the Brown lead on lance terminal marked (-Vb).

2.1.7 Push the connector on the Green lead on lance terminal marked (-Vr).

2.1.8 Push the connector on the Black lead on lance terminal marked (-ia).

2.1.9 Push the connector on the Orange lead on lance terminal marked (Vso).

2.1.10 Push the connector on the Yellow lead on lance terminal marked (-Vvo).

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2.2 Connections on the controller and gate board (CB).

2.2.1 Push the connector on the Black lead on lance terminal marked (-ia) on the top right corner of CB.

2.2.2 Push the connector on the Brown lead on lance terminal marked (-Vb) on the top right corner of CB just below the position where the Black lead was connected.

2.2.3 Push the connector on the Red lead on lance terminal marked (TR) on the top left of CB.

2.2.4 Push the connector on the Orange lead on lance terminal marked (Out 1) on the center of CB, just below Jumper 2J.

2.2.5 Push the connector on the Yellow lead on lance terminal marked (Out 2) located just below the Out 1 terminal (2.2.4).

2.2.6 Push the connector on the Blue lead on lance terminal marked (Out 3), located below the Out 2 terminal (2.2.5).

2.2.7 Push the connector on the Violet lead on lance terminal marked (PSP), located just below the Out 3 terminal (2.2.6).

2.2.8 Push the connector on the Green lead on lance terminal marked (Rin) on the bottom center of CB.

2.2.9 Push the connector on the Gray lead on lance terminal marked (PSN) near the bottom right side of CB.

2.2.10 Push the connector on the White lead on lance terinal marked (PSC) near the bottom right of CB just above terminal PSN (2.2.9).

2.3 This completes the electrical installation of the test module.

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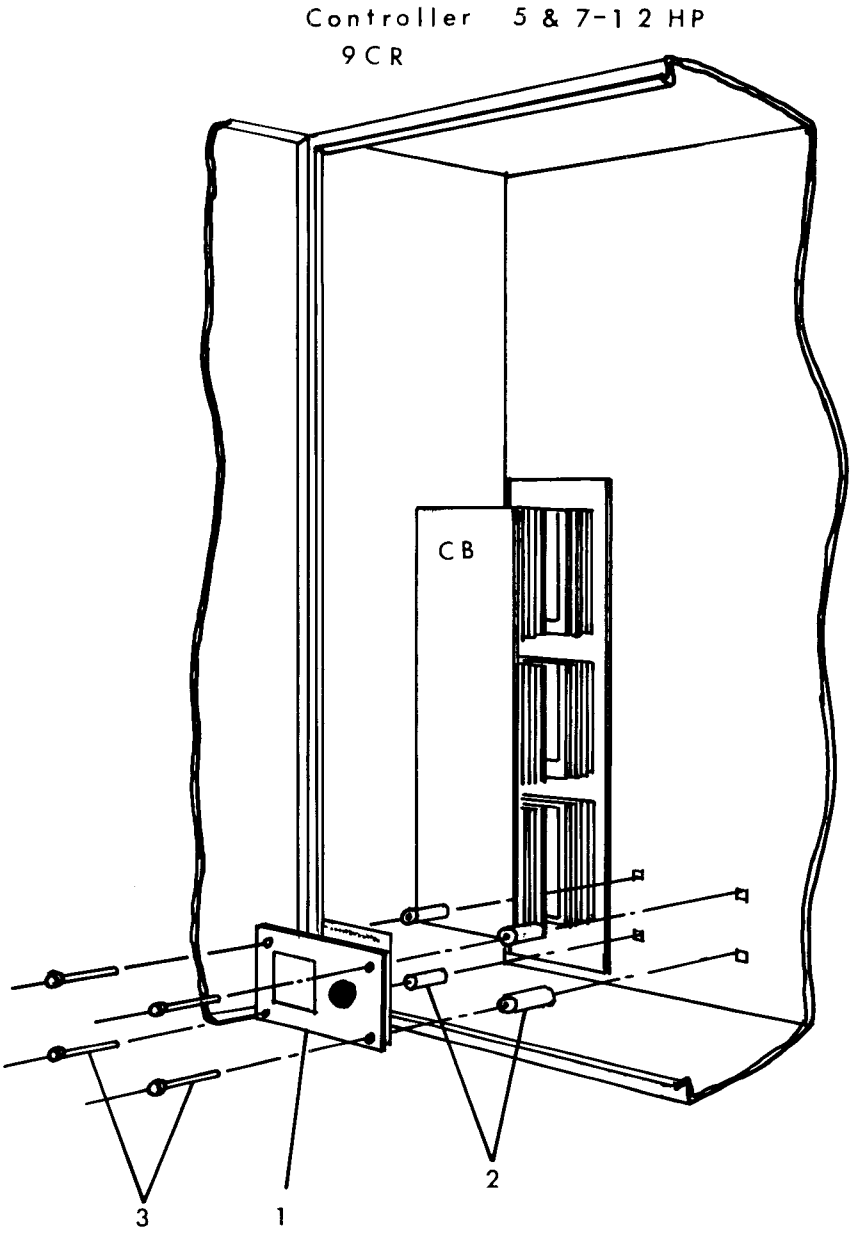

TEST MODULE MOUNTED ON PANEL

FIGURE 1

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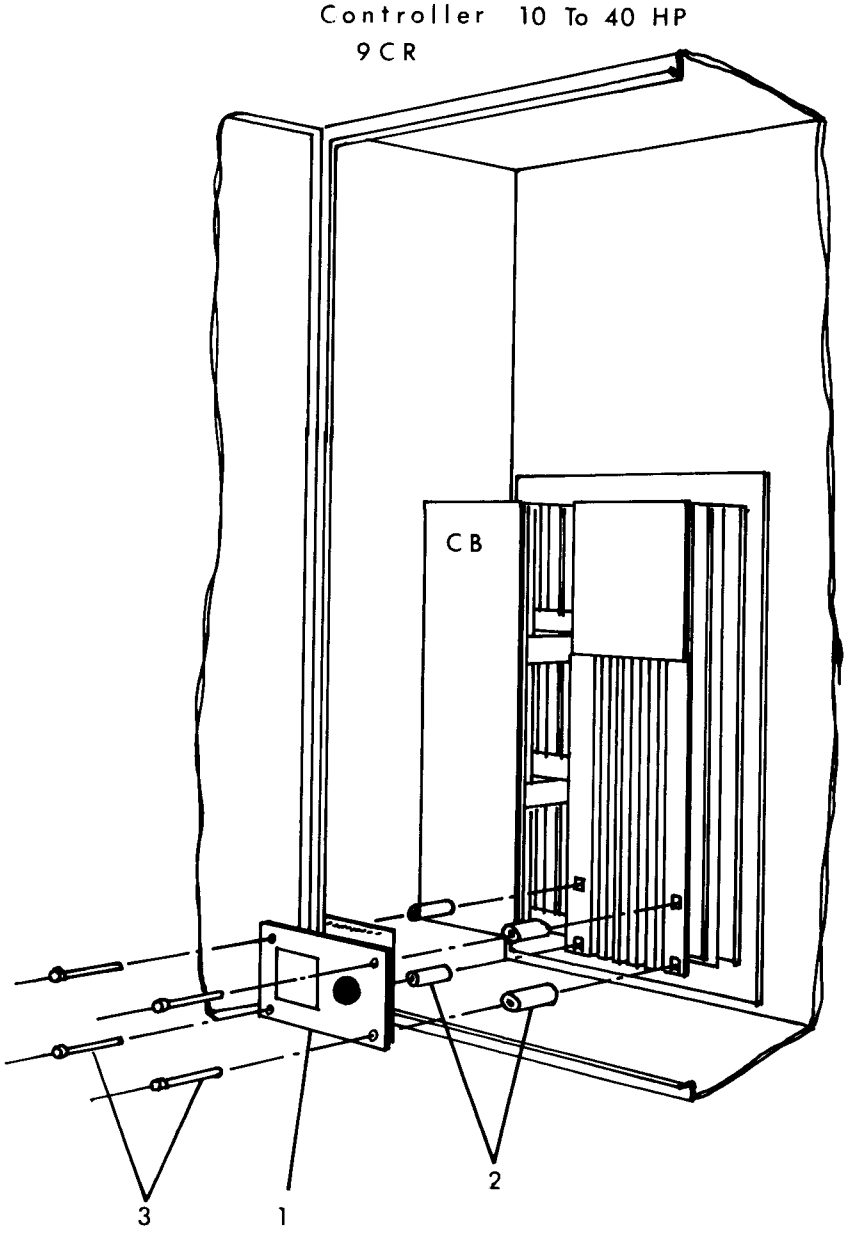

TEST MODULE MOUNTED ON CB

FIGURE 2

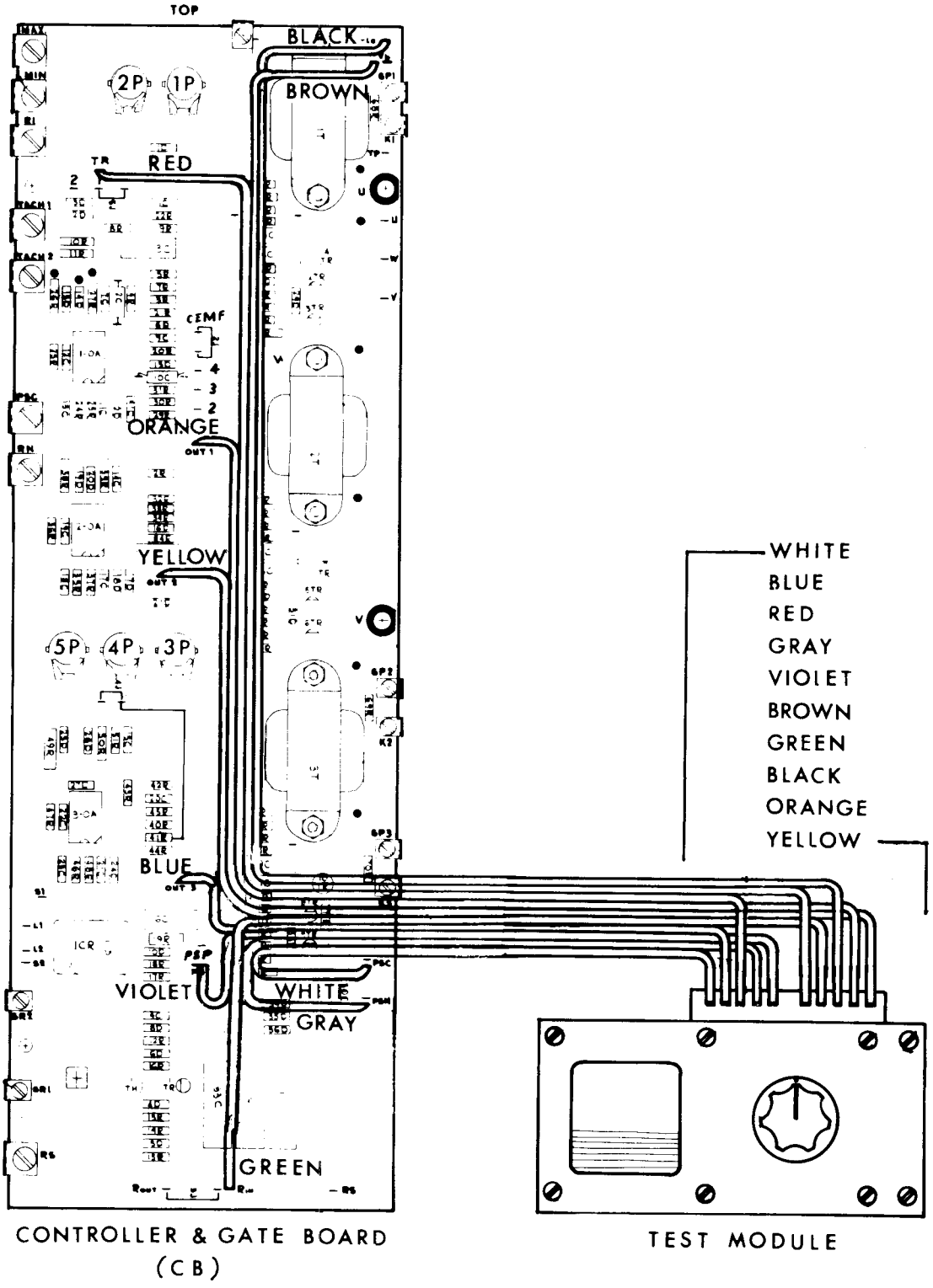

FIGURE 3

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