Dynatec® Controls

Dynatec® 2650 Control

Dual Channel Anti-Overlap
Torque Adjust Clutch/Brake Control

Description

The Dynatec® 2650 (D2650) is a solid-state anti-overlap clutch/
brake controller, engineered to operate 90 VDC clutch/brake
(C/B) coils with current loads up to 1.0 amp; Din rail mounting
for ease of installation.

This controller operates one or two coils, incorporating adjustable
output voltage (torque) for each channel and anti-overlap circuit.

The D2650 incorporates voltage protection on the AC input.
When transient voltage spikes or notching is present on AC lines,
an isolation transformer is required to filter the incoming power
to the D2650.

Specifications

Power Input

Voltage	115 VAC
Current	1.5 amp
Frequency	50/60 HZ
Fusing	Customer-supplied 2 amp

Power Output

Voltage	90 VDC
Current	1.0 amp Max.

D2650 Dimensions

Weight	15 oz.
Overall	2.76" H. x 1.97" W. x 4.30" D.

Temperature

Operating	0° to 65°C (32° to 149°F)

Features

- Meets **ЯU** Certification
- Anti-Overlap Circuit
- Dual Output Torque (Voltage) Adjustment
- 115 VAC Input
- Selective Input Switching Logic –115 VAC
- Status/Diagnostic LED'S:
    1. Clutch ON
    2. Brake ON

| Input Logic	Part No.
115 VAC, 50/60 Hz	**214237-040-2233**

D2650 Anti-Overlap

When using conventional controls where the output voltage is switched by a relay contact, overlap occurs when you see the arching across the contacts. This indicates that just for an instant the brake and clutch are both engaged. This graph represents overlap. The effect of this is excessive wear and heat to the clutch/brake system.

The Dynatec® 2650 incorporates MOV's and time delay logic that will prevent the effects of overlap. This graph illustrates the effects of anti-overlap. Notice the difference between the RPM curves. You have a shorter time to speed and time to zero, and the switching is more precise, creating less heat. These controls can actually operate the clutch/brake system at higher cycle rates, with better repeatability and less heat than conventional controls.
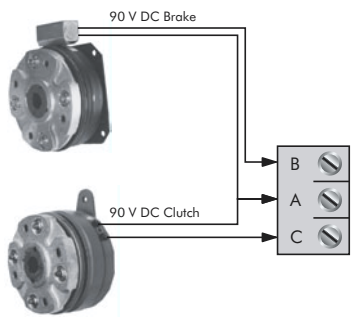

Clutch/Brake Shaft RPM Curve using Conventional Control
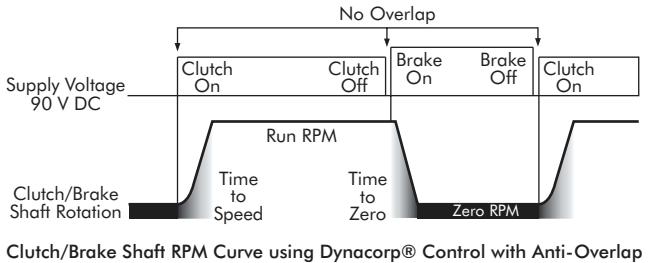
Clutch/Brake Shaft RPM Curve using Dynacorp® Control with Anti-Overlap

D2650 Wiring Information
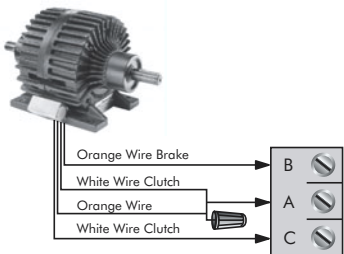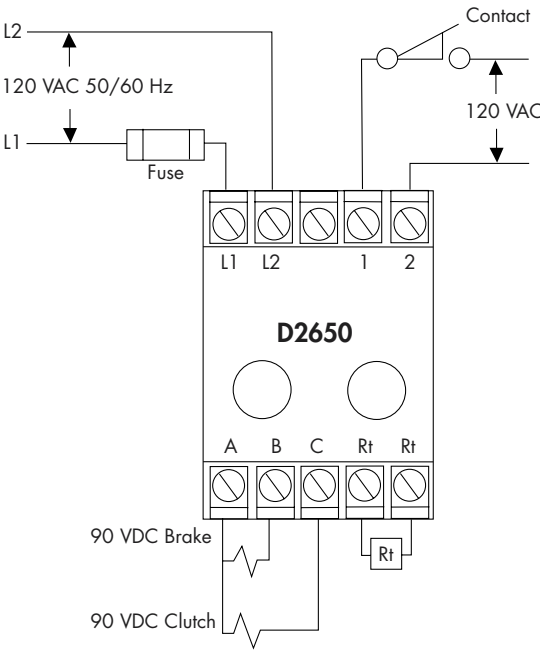
Dynacorp® Clutch/Brake Package Wiring

Single Clutch and Brake Wiring