

1204 Terminator

(Catalog Number 1204-TFA1, 1204-TFB2)

Where this Option is Used

The 1204 Terminator Option can be installed in most adjustable frequency AC drive applications to increase protection of the AC motor. The option is designed to be used with Allen-Bradley Adjustable frequency AC drives. When installed at the motor terminals, the terminator can reduce potentially destructive reflected wave spikes that can occur with long motor leads.

What this Option Contains

The Terminator Option contains the terminator device with an attached 1.4 meter (4.5 feet) standard 4 wire 3 mm² (12 gauge) connection cable.

What these Instructions Contain

These instructions contain the information you need to properly install the Terminator Option. Recommended mounting, connecting, and grounding procedures are included. Major topics and page numbers are listed below.

| Catalog Number Description |
|---|
| Dimensions, Weights and Cable Locations |
| Specifications |
| Heat Dissipation |
| Determining the Maximum Cable Length for Your System4 |
| Installation |
| Drive Programming9 |
| Grounding9 |
| Maintenance |

Catalog Number Description

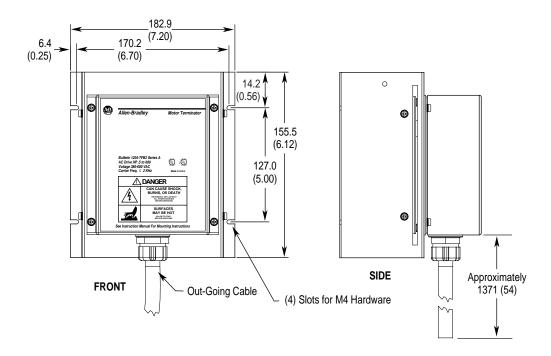
The following table provides information about the catalog number for the Terminator Option:

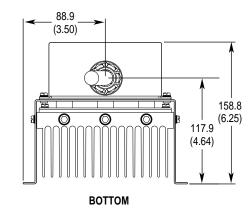
| 1204 -T | | F | B2 | | | | |
|-----------------------------------|---------------------------------|-----------------------------|---|---|--|--|--|
| First Position Bulletin No. | Second Position Type | Third Position NEMA Rating | Fourth Position Voltage Rating & Size | | | | |
| Description Bulletin Number | Letter Description T Terminator | F Description NEMA Type 4 | Code Voltage Rating Drive kW (HP)¹ A1 380-600V 0.37-3.7 (0.5-5) B2 380-600V 1.5-597 (2.0-800) | Maximum Allowable Drive Carrier Frequency 6 kHz 2 kHz | | | |

¹ Refer to the maximum cable length tables on pages 4 through 6.

Dimensions, Weights and Cable Locations

Refer to the following diagram for terminator dimensions and cable locations. The dimensions are given in millimeters and (inches). The terminator weighs 3.86 kilograms (8.5 pounds).





Specifications

The following specifications are provided for the Terminator Option.

| Category | Specifications | | | | | |
|-------------------------------|---|--|--|--|--|--|
| Input power | 380-600V, Three-Phase | | | | | |
| Maximum Drive Carrier | TFA1 – 6 kHz | | | | | |
| Frequency 1 | TFB2 – 2 kHz | | | | | |
| | Refer to "Drive Programming" on page 9 for additional information. | | | | | |
| Ambient temperature | 0-40 degrees C (32-104 degrees F) | | | | | |
| Humidity | 5-95% non-condensing | | | | | |
| Atmosphere | Atmosphere should not contain hazardous (volatile) dust, vapor, gas, or liquid. | | | | | |
| Heat dissipation ¹ | Refer to the heat dissipation table below. | | | | | |
| Enclosure type | IP65 (NEMA Type 4x) | | | | | |
| Agency certification | U.L., C-UL | | | | | |
| Altitude derating | Full rating 0-1000 meters (0-3280 feet) | | | | | |
| | degrees C. | | | | | |
| | 40 - | | | | | |
| | | | | | | |
| | Ambient | | | | | |
| | Temperature 35 - | | | | | |
| | | | | | | |
| | | | | | | |
| | 30 - 1 1,000 2,000 3,000 4,000 m (3,300) (6,600) (9,900) (13,200) (tt) | | | | | |
| | Altitude | | | | | |

¹ The drive PWM carrier frequency that you choose affects the heat dissipation and the surface temperature of the terminator.

Heat Dissipation

This chart is based on an ambient temperature of 45 degrees C.

| | | 1204-TFA1 Terminator | | | | 1204-TFB2 Terminator | | | |
|-----------|---------------|----------------------|-----------|-----------------|-----------|----------------------|-----------|-----------------|-----------|
| Drive | Length | 460 Volts + 10% | | 600 Volts + 10% | | 460 Volts + 10% | | 600 Volts + 10% | |
| Frequency | meters (feet) | Watts | Heatsink° | Watts | Heatsink° | Watts | Heatsink° | Watts | Heatsink° |
| 6 kHz | 91 (300) | 210W | 142° C | 220W | 150° C | | | | |
| | 183 (600) | 250W | 160° C | 260W | 169° C | Must Use 2 kHz | | | |
| 4 kHz | 91 (300) | 170W | 125° C | 180W | 133° C | | | | |
| | 183 (600) | 180W | 130° C | 210W | 138° C | | | | |
| 2 kHz | 91 (300) | 80W | 81° C | 100W | 95° C | 200W | 139° C | 290W | 182° C |
| | 183 (600) | 90W | 88° C | 140W | 104° C | 250W | 160° C | 360W | 215° C |