

## 3VU as a Manual Starter



### Ordering Information

- ▶ All enclosed devices supplied with 1 NO and 1 NC auxiliary contacts.
- ▶ Select by motor full load amperes. Horsepower ratings are for reference only.
- ▶ Accessories see pages 428–431.

### Single Motor Applications

Adj (FLA) Current Range	Max Frame Amp	1 Phase Horsepower <sup>①</sup> At Voltage:			Three Phase Horsepower At Voltage:				Maximum <sup>②</sup> Circuit Protection		1 NO and 1 NC Auxiliary Contacts	
		115	200	230	200	230	460	575	Fuse Amp	C.B. Amp	Catalog No	Price \$
0.1 – 0.16	25	—	—	—	—	—	—	—	③	15	3VU1300-1MB00	148.
0.16 – 0.24	25	—	—	—	—	—	—	—	③	15	3VU1300-1MC00	148.
0.25 – 0.4	25	—	—	—	—	—	—	—	③	15	3VU1300-1MD00	148.
0.4 – 0.6	25	—	—	—	—	—	—	—	③	15	3VU1300-1ME00	161.
0.6 – 1	25	—	—	—	—	1/4	1/2	1/2	③	15	3VU1300-1MF00	161.
1 – 1.6	25	—	1/8	1/4	1/4	1/2	3/4	1	③	15	3VU1300-1MG00	161.
1.6 – 2.4	25	—	1/8	1/4	1/2	1/2	1	1 1/2	③	15	3VU1300-1MH00	161.
2 – 3.2	25	—	1/4	1/2	1/2	3/4	1 1/2	2	③	15	3VU1300-1NH00	161.
2.4 – 4	25	1/4	1/2	1/2	1/2	3/4	1 1/2	2	③	15	3VU1300-1MJ00	161.
3.2 – 5	25	1/4	1/2	1/2	1	1	3	3	③	15	3VU1300-1NJ00	161.
4 – 6	25	1/4	1/2	1/2	1	1 1/2	3	3	③	15	3VU1300-1MK00	161.
5 – 8	25	1/4	3/4	1	2	2	5	5	③	30	3VU1300-1NK00	161.
6 – 10	25	1/2	1	1 1/2	2	3	5	5	③	40	3VU1300-1ML00	161.
8 – 13	25	1/2	1 1/2	2	3	3	7 1/2	10	③	50	3VU1300-1NL00	187.
10 – 16	25	1	2	2	5	5	10	15	③	60	3VU1300-1MM00	187.
14 – 20	25	1 1/2	3	3	5	5	10	15	③	80	3VU1300-1MN00	187.
18 – 25	25	1 1/2	3	3	5	7 1/2	15	20	③	100	3VU1300-1MP00	187.
1 – 1.6	65	—	—	1/16	1/8	1/4	3/4	1	③	15	3VU1600-1MG00	318.
1.6 – 2.4	65	—	1/8	1/4	1/4	1/2	1 1/2	2	③	15	3VU1600-1MH00	318.
2.4 – 4	65	1/8	1/4	1/2	1/4	3/4	1 1/2	2	③	15	3VU1600-1MJ00	318.
4 – 6	65	1/4	1/2	1/2	1	1 1/2	3	3	③	20	3VU1600-1MK00	318.
6 – 10	65	1/2	1	1 1/2	2	3	5	5	③	40	3VU1600-1ML00	318.
10 – 16	65	1	2	2	5	5	10	15	③	60	3VU1600-1MM00	344.
16 – 25	65	1 1/2	3	3	5	5	10	15	③	100	3VU1600-1MN00	344.
22 – 32	65	1 1/2	3	3	5	7 1/2	15	20	③	125	3VU1600-1MP00	396.
28 – 40	65	3	5	7 1/2	10	15	30	40	③	150	3VU1600-1MQ00	396.
36 – 52	65	3	7 1/2	10	15	20	40	50	③	200	3VU1600-1MR00	396.
45 – 65	65	5	10	15	20	25	50	60	③	250	3VU1600-1LS00	396.

① Single phase horsepower ratings are based on 3 poles wired in series.

② See technical information for maximum circuit protection device details.

③ Type T, CC, or RK fuses per N.E.C. table 430-152 to be 175% not to exceed 225% of motor full load current.

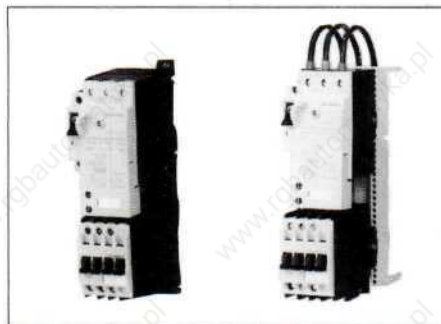
IEC Control



## Applications

The versatile 3VU Series is designed to meet a variety of motor starter applications. The 3VU contains both an adjustable bi-metal thermal and a fixed magnetic trip device. This allows the 3VU to meet all customer requirements.

The factory built-in instantaneous (magnetic) trip is coordinated to protect the load and the load conductors at their rated withstand levels without additional adjustments.



The inverse-time overload protection is adjustable to match the rated current of the motor to be protected. An internal differential mechanism accelerates the trip time during a phase loss.

The 3VU Series is designed for switching AC current. However, they are suitable for use in DC circuits.

### 1. Individual Manual Motor Starter

3VU used to protect and manually control a motor. Select by motor FLA and type of enclosure required. Be sure to observe maximum circuit protection device allowed for installation. See page 422 for selection.

### 2. Individual Self Protected Type "E" Combination Motor Starter

Many modular motor controllers indicated in Selection Chart (SCE1634... or FBE1634...) are UL508 Type E Combination Motor Starters. These are complete combination starters and can be applied without additional branch circuit protection. They can be used individually or in groups for multiple motor applications. See page 425 for selection.

### 3. Multiple Motor Applications

#### a) Group Installation per NEC 430-53

3VU devices with or without 3TF contactors can be applied to Multiple Motor Applications utilizing Group Installation. Please refer to Technical Information for Application Details and page 423 for selection.

For mounting convenience, modular motor controllers are available in 35 mm DIN Rail Mounting (3VH...) and "Fast Bus" mounting (FBM...). See Selection and Ordering Data page 424.

#### b) Multiple Motor Type "E"

3VU1300 MSP's with 3TF34 or 3TF44 contactor can be used in multiples up to 56A with a 3VU91 current limiter for a self protected UL508 Type "E" system. SCE, FBE, and FWE product for this application have been identified in a special selection and ordering section on page 426.

## Applications Include:

- Manual Motor Starter providing manual starter and adjustable overload protection.
- Self-protected Combination Motor Starter (UL 508 Type E).
- Multiple Motor Applications utilizing Group Installation.
- Self-protected Combination Motor Controller in Multiple Motor applications (UL 508 Type E).

