

Series KTV9 Multi-Motor Controllers for Application at Output of VFD



KTV9 Advanced Features for Non-Motor Loads

The Sprecher+Schuh KTV9 series self protected combination motor controllers are suitable for application at the output of variable frequency drives (VFDs) in multi motor installations. They provide individual overload protection in multiple motor applications as required by NEC §430, part III.

KTV9 self-protected combination motor controllers may provide the following protective and control functions:

Features and Benefits

- Suitable for application at output of variable frequency drives in multi-motor applications
- PWM Frequency < 4kHz
- Variable frequency drive output frequency \leq 400Hz
- Fixed magnetic trip
- Motor overload protection, Trip Class 10
- Current limiting
- Nominal max rated voltage UL: 480V
- Interrupt rating @ 480Y/277V: up to 65kA

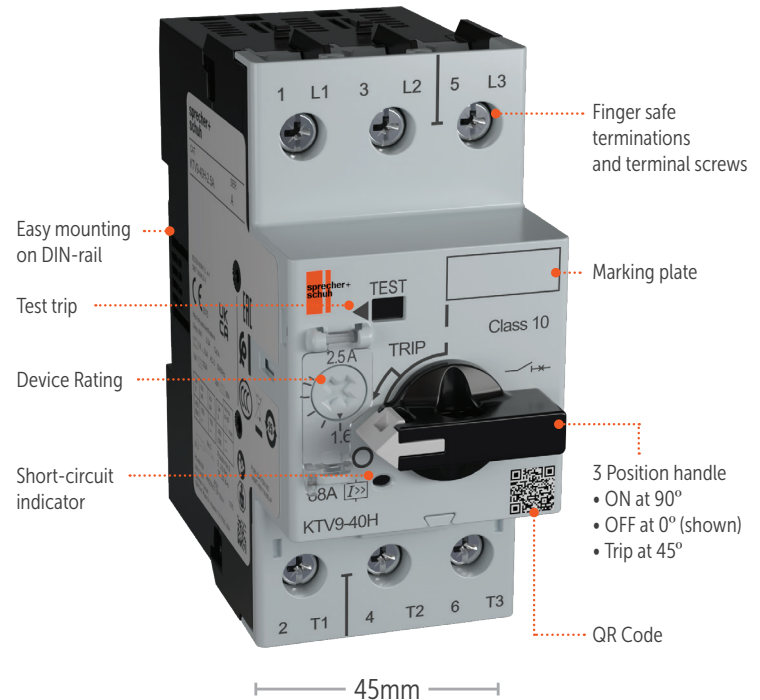
Ideal Applications

- Disconnect for motor branch circuit
- Branch-circuit, short-circuit protection (magnetic protection)
- Overload protection (thermal protection)
- Manual controller (ON/OFF)

Overview

KTV9 offers an interrupt rating up to 100kA (@ 400V). The KTV9 also has an interrupt rating six times higher than traditional miniature circuit breakers. This may achieve in a higher overall interrupt capacity panel rating.

Contact your Sprecher + Schuh representative for more information.

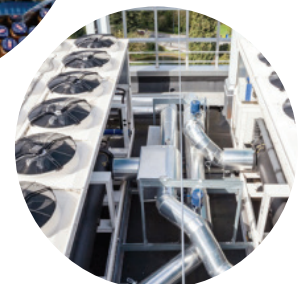


Smaller footprint than competitive devices with the same performance



Manufacturing plant

HVAC/R



KTV9 Enclosed UL 489 MCCBs

The Sprecher+Schuh KTV9 series motor controllers are suitable for two types of applications under cULus listings:

- (1) as a Manual, Self-protected Motor Controller or
- (2) as a Manual Motor Controller with approval for group installation (and as a motor disconnect)

When UL/CSA listed as a manual, self-protected combination motor controller, the KTV9 provides all of the necessary NEC requirements for protection and control of individual motor branch circuits without additional protective devices (per NEC 430-52C option 6).

When KTV9 devices are applied as manual motor controllers in group installations, then NEC group installation rules state these devices must be applied per the appropriate rules, which require the use of an upstream BCPD-branch circuit protection device (per NEC 430-53C option 2).

Suitable for use with Variable Frequency Drives

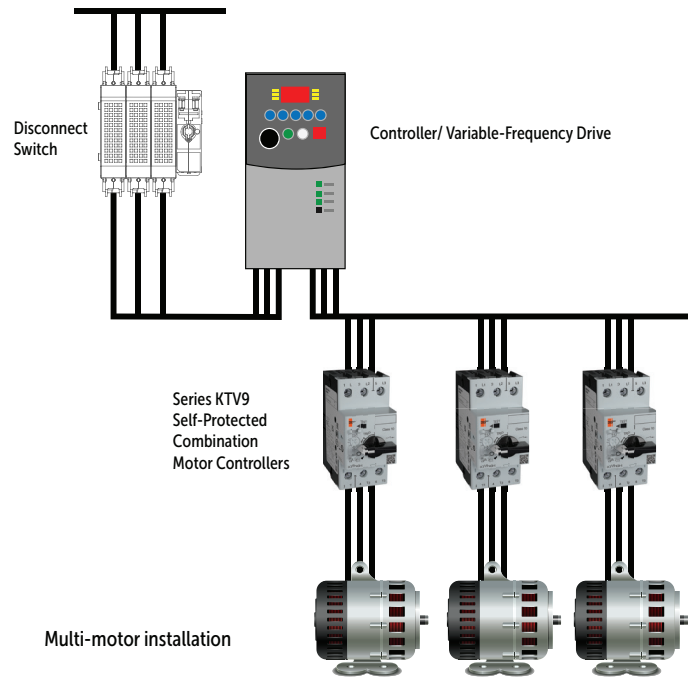
The output frequency of the VFD must be limited to 400Hz or less to prevent thermal degradation. Various models of the KTV9 series self-protected combination motor controllers provide disconnection for motor branch circuits, branch-circuit and short-circuit protection (including magnetic protection), overload/thermal protection and manual switching.

Ratings & Selection

Rated Operational Current (I _e)	Current Adjustment Range [A]	Nominal Magnetic Trip Current	Maximum Short Circuit Current [kA]		Maximum Horsepower Typical ^{①②} Three Phase [HP]				Catalog Number
			480Y/277V	480V	200V	230V	460V	575V	
			Type E	(group motor)					
[A]	[A]	[A]							
16	10...16	88	65	65	~	~	3/4	~	KTV9-40H-1.6A
2.5	1.6...2.5	88	65	65	1/2	1/2	1	~	KTV9-40H-2.5A
4.0	2.5...4.0	88	65	65	3/4	3/4	2	~	KTV9-40H-4.0A
6.3	4.0...6.3	88	65	65	1	1-1/2	3	~	KTV9-40H-6.3A
10	6.3...10	140	65	65	2	2	5	~	KTV9-40H-10A
16	10...16	224	65	65	3	5	10	~	KTV9-40H-16A
20	14.5...20	280	65	65	5	5	10	~	KTV9-40H-20A
25	18...25	350	50	30	5	7-1/2	15	~	KTV9-40H-25A
29	23...29	406	50	30	7-1/2	10	20	~	KTV9-40H-29A
32	26.5...32	448	30	30	7-1/2	10	20	~	KTV9-40H-32A
36	30...36	432	30	30	10	10	25	~	KTV9-40H-36A
40	34...40	480	30	30	10	10	30	~	KTV9-40H-40A

① HP ratings shown are for reference. Final selection of MPCB is determined by actual motor full load current.
 ② KTV9 is not applicable at 575V.

Contact your Sprecher + Schuh representative for more information.
 For more information visit sprecher.shuh.com



The KTV9 self-protected combination motor controllers are current limiting and have a fixed magnetic trip. Interrupt ratings at 400V and 480V are available up to 65kAIC. The VFD output pulse-width modulation frequency must be limited to 4 kilohertz or less. The circuit breakers provide motor overload protection with a trip class 10 characteristic.