

KTA3 Motor Circuit Controller

Reduces panel space
and saves money in
group motor applications



In one small package, Sprecher + Schuh's KTA3 Motor Circuit Controller combines the functions of:

- Short circuit protection,
- Thermal overload protection,
- Switching, and
- Signaling

Ideal for group motor installations...

The KTA3 can eliminate the need for larger and more expensive fuse blocks and fused disconnects, or circuit breakers. The potential cost savings in group motor installations can be as much as 35% over conventional methods of branch circuit protection. And, because so many features are combined into one small unit, panel space can be slashed by as much as 60%.

In addition, the KTA3 line offers a wide application range from 0.1 to 90 FLA in installations up to 600V. For group motor applications, the KTA3 series has up to a 2000A group installation rating, one of the highest in the industry.

Or as a manual starter

The KTA3 is also an excellent manual motor starter that employs all of the same motor protection features in one compact unit. The KTA3 is available in a variety of enclosures including general purpose, watertight and explosion proof (the most compact on the market today).

Excellent short circuit and thermal overload protection

In the event of a short-circuit, the contacts are opened by magnetic, non-adjusting tripping elements in times approaching 1/1000 of a second. This results in the extremely rapid build-up of an arc voltage which limits the current of the short-circuit to a very low level. Because of this superb current limiting capability, the KTA3 has a



short-circuit capacity of up to 42kA at 600V.

Because each KTA3 is individually calibrated at the factory for the smallest and largest current, very accurate thermal overload protection is also obtained. In addition, the KTA3 is a Class 10 device ... it trips within 10 seconds under a locked rotor condition (6 x FLA).

Other protection features

Single-phase protection is provided by the KTA3-25 at a maximum of 1.25 x FLA, thus accurate adjustment of the overload trip ensures effective motor protection even with a phase loss. The KTA3-100 provides accelerated tripping under single-phase conditions through the use of a differential tripping mechanism (see Section A in this catalog for a full explanation of differential tripping).

Every KTA3 Motor Circuit Controller is also equipped with automatic ambient temperature compensation, which continually adjusts to surrounding temperatures. As a result, trip times remain constant.

Accessories add versatility

Whether in group motor installations or as a manual motor starter, numerous accessories are available to enhance the KTA3's performance.



The new KTA3-100 is rated to 90A and has a 2000A group installation rating, one of the highest in the industry.

The KTA3 In Group Motor Applications

NEC article 430-52 states that each motor must have a Branch Circuit Protective Device (BCPD) consisting of a fused disconnect, fuse block, or circuit breaker. A typical circuit is illustrated in Figure 1.

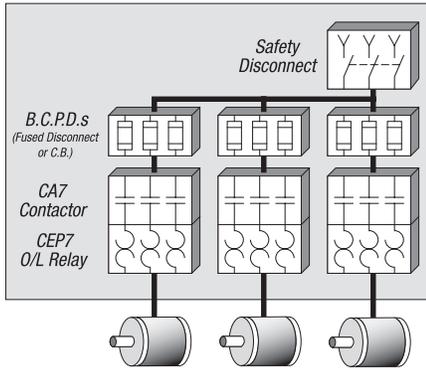


Figure 1
Article 430-52 Circuitry

Even though this method is highly effective, it has several drawbacks.

- Breakers or fuse blocks for each motor circuit are expensive.
- The panel space required to house many components like this is substantial.
- Installations of this type are labor intensive and therefore more costly.

The next article of the code (430-53), however, provides several exceptions to 430-52 that allow you to connect a group of motors under one BCPD.

These exceptions can be found under:

①

- 430-53(a) – Titled: “For Motors 1 HP or Less”
- 430-53(b) – Titled: “If The Smallest Motor is Protected”
- 430-53(c) – Titled: “In Other Group Installations”

For example, Figure 2 illustrates how a circuit would look utilizing provisions (a) or (b) above. What was once three branch circuits, with three BCPD’s, is now one branch circuit with one BCPD.

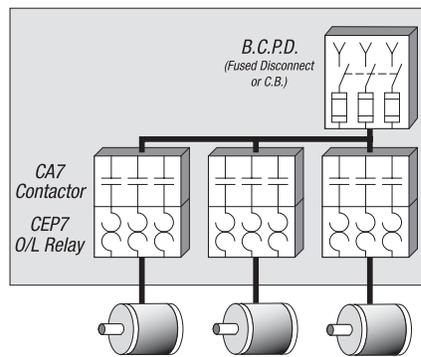


Figure 2
Article 430-53 Circuitry Without KTA3

It appears that the exceptions in 430-53 take care of the expensive drawbacks to having one BCPD for each motor. We have eliminated the expensive fuses (or circuit breakers). We have significantly reduced the panel space, and we have reduced the labor it takes to install the circuit.

Unfortunately, this solution raises a different set of problems.

- To service one motor, the power must be disconnected at the BCPD. This, of course, removes power to all of the other motors.
- The user gives up “close” individual protection against faults that are lower than the BCPD protection rating.
- NEC 430-52 (a) or (b) limits the group to a few small motors.

However, by applying the KTA3 under 430-53 (c) (Figure 3), the problems associated with 430-53 (a) and (b) are overcome.

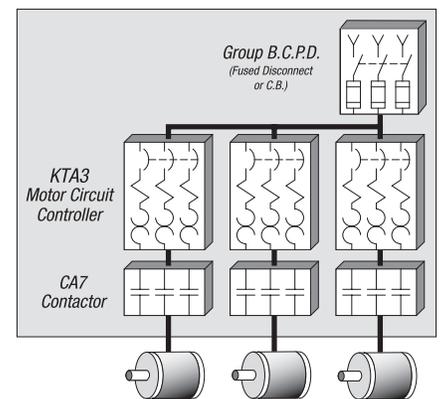


Figure 3
Article 430-53 Circuitry With KTA3

- We have eliminated all but one fuse block (or circuit breaker).
- We have significantly reduced the size of the panel.
- We have decreased the wiring and installation time.
- We have provided an individual disconnect for each motor.
- We have assured protection against low level faults that the BCPD would pass.
- We have a product that is labeled for group installations.
- We can group larger horsepower motors with smaller ones.



Using the KTA3 in group motor applications can reduce panel space as much as 60%.

① For more information on applying KTA3 under 430-53, contact your Sprecher + Schuh representative.

KTA3 Base Unit ①

Maximum Horsepower ①②						O/L Relay Ampere Range	Magnetic Response Current	Ordering Information ①	
Single Ø ②		Three Ø						Catalog Number	Price
115V	230V	200V	230V	460V	575V				
~	~	~	~	~	~	0.1 - 0.16	1.8	KTA3-25-0.16A	133
~	~	~	~	~	~	0.16 - 0.25	2.8	KTA3-25-0.25A	133
~	~	~	~	~	~	0.25 - 0.4	4.4	KTA3-25-0.4A	133
~	~	~	~	~	~	0.4 - 0.63	6.9	KTA3-25-0.63A	154
~	~	~	~	1/3	1/2	0.63 - 1	11	KTA3-25-1A	154
~	~	~	~	3/4	3/4	1 - 1.6	18	KTA3-25-1.6A	154
1/10	1/6	1/2	1/2	1	1 1/2	1.6 - 2.5	28	KTA3-25-2.5A	154
1/8	1/3	3/4	3/4	2	3	2.5 - 4	44	KTA3-25-4A	154
1/4	1/2	1 1/2	1 1/2	3	5	4 - 6.3	69	KTA3-25-6.3A	154
1/2	1 1/5	2	3	5	7 1/2	6.3 - 10	110	KTA3-25-10A	176
1	2	3	5	10	10	10 - 16	176	KTA3-25-16A	176
1 1/2	3	5	5	10	15	16 - 20	220	KTA3-25-20A	176

Short Circuit Ratings ③

Catalog Number	Manual Motor Starter / Group Ratings			
	Short Circuit Rating (kA)		Short Circuit Rating w/ KTL3-65-N	
	480V	600V	480V	600V
KTA3-25-0.16	42	42	~	~
KTA3-25-0.25	42	42	~	~
KTA3-25-0.4A	42	42	~	~
KTA3-25-0.63A	42	42	~	~
KTA3-25-1A	42	42	~	~
KTA3-25-1.6A	42	42	~	~
KTA3-25-2.5A	42	42	~	~
KTA3-25-4A	18	18	~	~
KTA3-25-6.3A	18	10	42	42
KTA3-25-10A	10	10	42	42
KTA3-25-16A	10	5	14	14
KTA3-25-20A	5	~	~	~
KTA3-25-25A	No longer UL Approved			
KTA3-100-25A	65	42	~	~
KTA3-100-40A	65	42	~	~
KTA3-100-63A	42	18	~	~
KTA3-100-90A	35	10	~	~

① Horsepower ratings shown are for reference. The final selection of the manual starter depends on the actual motor full load amps and service factor.

Example #1:

For a motor with a service factor of 1.15 or greater, use the motor nameplate full load amps and choose the motor starter with the appropriate current range.

Motor F.L.A. 4.2A
 Service Factor x 1.15
 Effective Current = 6.3A

Select catalog number KTA3-25-6.3

Example #2:

For a motor with a service factor less than 1.15, use the motor nameplate full load amps times 0.9 and choose the motor starter with the appropriate current range.

Motor F.L.A. 4.2A
 Service Factor x 1.0
 Multiplier x 0.9
 Effective Current = 3.78A

Select catalog number KTA3-25-4

② Single phase horsepower ratings are based on wiring the 3 poles of the device in series.

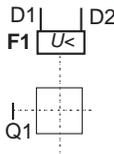
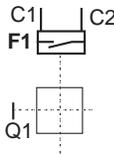
③ Reference Sprecher+Schuh UL file #E54612

Accessories for KTA3-25

Accessory	Description	Wiring Diagram	Catalog Number	Price
	Auxiliary Contact Block (NO) - mounts internally.		KT3-25-PE1-10	15
	Auxiliary Contact Block (NO) - mounts internally, terminal markings appropriate when also using "PA" type auxiliary contact.		KT3-25-PE2-10	15
	Auxiliary Contact Block (NC) - mounts internally.		KT3-25-PE1-01	15
	Auxiliary Contact Block (NC) - mounts internally, terminal markings appropriate when also using "PA" type auxiliary contact.		KT3-25-PE2-01	15
	Auxiliary Contact Block (Early Make) mounts internally.		KT3-25-PE-L10	15
	Two pole Auxiliary Contact Block (NO/NC) - for side mounting. If using Compact Bus Bar System, choose bus bar with 54mm spacing.		KT3-25-PA-11	28
	Two pole Auxiliary Contact Block (NO/NO) - for side mounting. If using Compact Bus Bar System, choose bus bar with 54mm spacing.		KT3-25-PA-20	28
	Two pole Auxiliary Contact Block (NC/NC) - for side mounting. If using Compact Bus Bar System, choose bus bar with 54mm spacing.		KT3-25-PA-02	28

Accessories for KTA3-25 continued on next page →

Accessories for KTA3-25 (continued from previous page)

Accessory	Description	Wiring Diagram	Catalog Number	Price															
	Trip Indicator (NO) - mounts internally. Provides indication of a short circuit or thermal overload condition. Will not indicate a KTA3 that has been manually tripped.		KT3-25-PF-10	28															
	Trip Indicator (NC) - mounts internally.		KT3-25-PF-01	28															
	Undervoltage Release Module - mounts on right hand side. Prevents KTA3-25 from operating unless voltage is present.		KT3-25-UA-*	65															
	Shunt Release Module - mounts on right hand side. Remotely trips the KTA3-25.		KT3-25-AA-*	65															
	Current Limiter - Increases the short circuit capacity of selected KTA3 devices to the following values: <table border="1" data-bbox="407 1178 667 1293"> <tr> <td></td> <td>480V</td> <td>600V</td> </tr> <tr> <td>KTA3-25-6.3A</td> <td>42kA</td> <td>42kA</td> </tr> <tr> <td>KTA3-25-10A</td> <td>42kA</td> <td>42kA</td> </tr> <tr> <td>KTA3-25-16A</td> <td>42kA</td> <td>14kA</td> </tr> <tr> <td>KTA3-25-20A</td> <td>14kA</td> <td>10kA</td> </tr> </table> Snaps directly onto the KTA3 or mounts adjacent using the Compact Bus Bar System (when using the Current Limiter, a Supply Block is not needed). Can be used in Group Motor Installations with high available fault currents. Fault repulsion contacts close automatically.		480V	600V	KTA3-25-6.3A	42kA	42kA	KTA3-25-10A	42kA	42kA	KTA3-25-16A	42kA	14kA	KTA3-25-20A	14kA	10kA		KTL3-65-N	67
	480V	600V																	
KTA3-25-6.3A	42kA	42kA																	
KTA3-25-10A	42kA	42kA																	
KTA3-25-16A	42kA	14kA																	
KTA3-25-20A	14kA	10kA																	
	Adaptor Plate Provides capability to base mount one KTA3-25		KT3-25-AS	11															
	Locking Fixture Padlocking attachment for one KTA3-25. Locks in the OFF position only. Metal construction. Holds one to three padlocks with 6mm hasps.		KTA3-25-DSC	11															

Undervoltage & Shunt Release Ordering Instructions

- Specify Catalog Number
- Replace (*) With Overload Relay Code

Coil Selection (*)

Coil Code	Coil Voltage
28V	28V60Hz/24V50Hz
127V	127V60Hz/110V50Hz
240V	240-260V60Hz/220-230V50Hz
277V	277V60Hz/240V50Hz
440V	440-460V60Hz/380-400V50Hz
480V	480V60Hz/415V50Hz

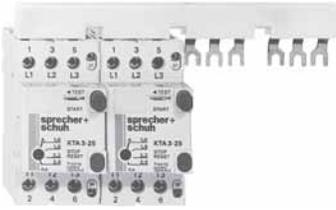
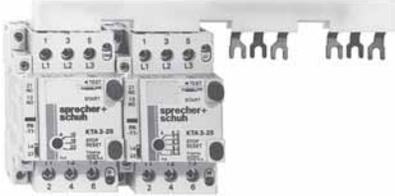
Accessories for KTA3-25 continued on next page →

Accessories for KTA3-25 (continued from previous page)

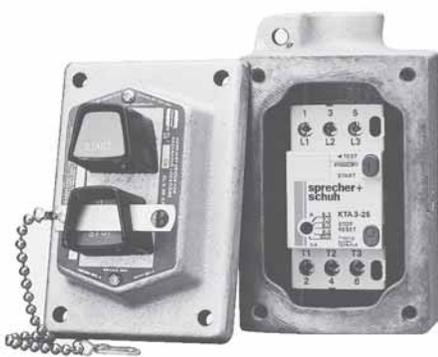
Accessory	Description	Voltage / Rated Current	Catalog Number	Price
	<p>Enclosures - For mounting one KTA3 with side mount accessories. Knockouts for two type "DL" pilot lights. Includes ground and neutral terminals.</p> <p>General Purpose (IP41) Watertight (IP55)</p>		<p>KT3-25-KA KT3-25-KAZ</p>	<p>49 86</p>
	<p>Enclosure Pilot Light ① - Neon lamp with plug connector and 180mm cable. Degree of protection - IP54.</p> <p>Red Red Green Green White White Yellow Yellow</p>	<p>110/120VAC 220/240VAC 110/120VAC 220/240VAC 110/120VAC 220/240VAC 110/120VAC 220/240VAC</p>	<p>KT3-25-DL-R-110V KT3-25-DL-R-220V KT3-25-DL-G-110V KT3-25-DL-G-220V KT3-25-DL-W-110V KT3-25-DL-W-220V KT3-25-DL-Y-110V KT3-25-DL-Y-220V</p>	28
	<p>Enclosure Locking Fixture - For use with KT3-25-KA enclosures. Holds one to three padlocks with 6mm hasps.</p>		KT3-25-DS	11
	<p>Enclosure Membrane - Replacement membrane for KT3-25-KAZ enclosure. Includes 4 mounting screws (membrane only, does not include mounting frame).</p>		KT3-25-DM	5
	<p>Connecting Module ② - Provides a solid "wireless" connection between a KTA3 Motor Circuit Controller and all CA4 contactors.</p>	12A	KCD4	7
	<p>Connecting Module - Provides a solid "wireless" connection between a KTA3 Motor Circuit Controller and a CA7 contactor.</p> <p>Connects CA7-9...23</p>	20A	KT3-NW23	12

- ① 480V lights available as special order. Contact your Sprecher + Schuh representative.
- ② Designed for CA4-9-01 only. If Normally Open contact required, add CA4-P02 two pole auxiliary contact block.

Compact Bus Bar System for KTA3-25

Accessory	Description	Catalog Number	Price
	<p>Compact Bus Bar - 45mm spacing - Bus bar with 45mm spacing accepts KTA3's with <i>or without</i> internally mounted auxiliary or trip signal contact. Rated to 65A (UL)/63A (IEC).</p> <p>Connects two KTA3-25's Connects three KTA3-25's Connects four KTA3-25's Connects five KTA3-25's</p>	<p>KT3-25-DB-45-2 KT3-25-DB-45-3 KT3-25-DB-45-4 KT3-25-DB-45-5</p>	<p>27 31 35 39</p>
	<p>Compact Bus Bar - 54mm spacing - Bus bar with 54mm spacing accepts KTA3's with side mounted auxiliary contact (type PA-11). Rated to 65A (UL)/63A (IEC).</p> <p>Connects two KTA3-25's Connects three KTA3-25's Connects four KTA3-25's Connects five KTA3-25's</p>	<p>KT3-25-DB-54-2 KT3-25-DB-54-3 KT3-25-DB-54-4 KT3-25-DB-54-5</p>	<p>27 31 35 39</p>
 <p>KT3-25-A2 KT3-25-A3</p>	<p>Supply Block - Provides connection from bus bar to power. (When using the Current Limiter, Supply Blocks are not required.)</p>	<p>KT3-25-A2 KT3-25-A3</p>	<p>28 22</p>
	<p>Blank Space Cover - Covers bus bar connections where no KTA3-25 is mounted.</p>	<p>KT3-25-DBA</p>	<p>3</p>

KTA3 Explosion Proof Manual Starter - Type "E3" ①

 <p>Class I, Division 1 & 2, Group C & D Class II, Division 1 & 2, Group E, F & G Class III NEMA 7CD & 9EFG</p>	Maximum Horsepower						O/L Relay Ampere Range	Magnetic Response Current	Ordering Information			
	Single Ø		Three Ø						Catalog Number	Price		
	115V	230V	200V	230V	460V	575V						
	1/10	1/6	1/2	1/2	1	1 1/2	0.1 - 0.16	1.8			KTA3-25-0.16A-E3	350
							0.16 - 0.25	2.8			KTA3-25-0.25A-E3	350
							0.25 - 0.4	4.4			KTA3-25-0.4A-E3	350
							0.4 - 0.63	6.9			KTA3-25-0.63A-E3	350
							0.63 - 1	11			KTA3-25-1A-E3	350
							1 - 1.6	18			KTA3-25-1.6A-E3	350
	2	3	5	7 1/2	15	20	1.6 - 2.5	28			KTA3-25-2.5A-E3	350
2.5 - 4							44	KTA3-25-4A-E3	350			
4 - 6.3							69	KTA3-25-6.3A-E3	350			
6.3 - 10							110	KTA3-25-10A-E3	350			
						10 - 16	176	KTA3-25-16A-E3	365			
						16 - 20	220	KTA3-25-20A-E3	400			

KTA3 Modifications (Factory Assembled)

Description	Catalog Number Suffix	Adder
Auxiliary Contacts		
1 NO - Internal	-PE1-10	15
1 NC - Internal	-PE1-01	15
1 NO (Early make) - Internal	-PE-L10	15
1 NO & 1 NC - External	-PA-11 ②	28
2 NO - External	-PA-20 ②	28
2 NC - External	-PA-02 ②	28
Trip Indicators		
1 NO - Internal	-PF-10	28
1 NC - Internal	-PF-01	28
Enclosure Padlock Hasp (for EX3 enclosure)	-DS	45

Coil Selection (*)

Coil Code	Coil Voltage
28V	28V60Hz/24V50Hz
127V	127V60Hz/110V50Hz
240V	240-260V60Hz/220-230V50Hz
277V	277V60Hz/240V50Hz
440V	440-460V60Hz/380-400V50Hz
480V	480V60Hz/415V50Hz

Ordering Instructions

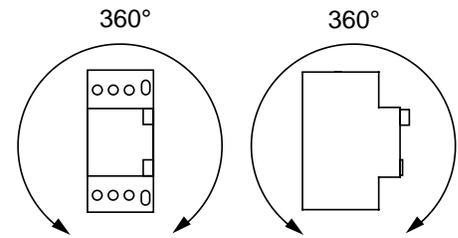
<ul style="list-style-type: none"> Specify Catalog Number Replace (*) With Coil Code where applicable 	<p>See Coil Code table on this page for codes</p>
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① "Feed Through" type conduit hubs provided as standard.
② Modification not available on Type "E3" starter.

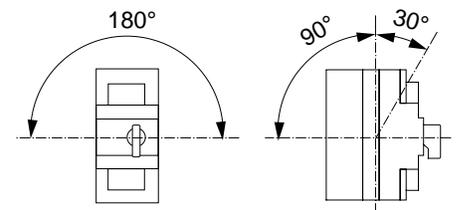
Technical Information

	KTA3-25...	KTA3-100...
Standards	UL 508; CSA22.2; IEC 947-1/2/4/5; EN 60947	
Approvals	UL, CSA, CE, SEV, Germ. Lloyd, CEBEC, PTB, DEMKO, SEMKO, SETI, NEMKO, Bureau Veritas, Lloyd's Register of Shipping, Maritime Register of Shipping, RINA, KEMA	UL, CSA, CE, Lloyd's Register of Shipping (being tested)
Rated Insulation Voltage		
IEC, SEV, VDE0660 [V]	690	690
UL, CSA [V]	600	600
Rated Frequency [Hz]	40...60	40...60
Rated Operating Current [A]	0.1...25 (13 ranges)	16...90 (4 ranges)
Life		
Mechanical [operations]	100,000	30,000
Electrical [operations]	100,000	10,000 @ 63A – 5,000 @ 90A
Switching Frequency	Max. 30 operating cycles/hour	Max. 20 operating cycles/hour
Ambient Temperature		
Storage	-25°C to +80°C	-25°C to +80°C
Operation	-25°C to +60°C	-25°C to +60°C
Resistance to climatic change		
Humid heat	40°C, 92%, 56 days	40°C, 92%, 56 days
Alternating climatic conditions	23°C, 83%/40°C, 93%, 56 cycles	23°C, 83%/40°C, 93%, 56 cycles
Degree of Protection	IP20	IP20
Impact Resistance	30g, 20ms	Being tested
Vibration Strength		
Frequency Range	10...150Hz	10...150Hz
In all directions	>7.5g	Being tested
Overload Protection		
Tripping Time	See time/current curve	See time/current curve
Phase failure protection		Differential tripping
Temperature Compensation	-20°C... +60°C	-20°C... +60°C
Magnetic Response	11 x I _e max. (fixed setting) (I _e max. = max value of the setting range)	14 x I _e max. (fixed setting)
Terminal Connections		
KTA3 base unit	16 to 10 AWG	12 to 2 AWG
KTL3-65-N & KT3-25-A2 L1-L2-L3 terminals	14 to 8 AWG	
T1-T2-T3 terminals	14 to 10 AWG	
Auxiliary Contact Blocks		
Ampere Ratings		
Internal (KTA3-25 & KTA3-100)	To NEMA B600 R300	To NEMA B600 R300
External (KTA3-25)	To NEMA B600 R300	
Thermal Rated Current		
KT3-...-PE	6A @ 40°C, 4A @ 60°C	10A @ 40°C, 6A @ 60°C
KT3-25-PA	10A @ 40°C, 6A @ 60°C	
KT3-100-PF		10A @ 40°C, 6A @ 60°C
Terminal Connections	18 to 14 AWG	18 to 12 AWG
Undervoltage & Shunt Release		
Maximum coil voltage	110% of rated voltage	110% of rated voltage
Pull-in Voltage	80-110% of rated voltage	80-110% of rated voltage
Drop-out voltage	35-70% of rated voltage	35-70% of rated voltage
Coil Burden		
Pull-in	8.5 VA (6.0 watt)	
Seal-in	3.0 VA (1.2 watt)	
Terminal Connections	18 to 14 AWG	18 to 12 AWG

Mounting Position - KTA3-25



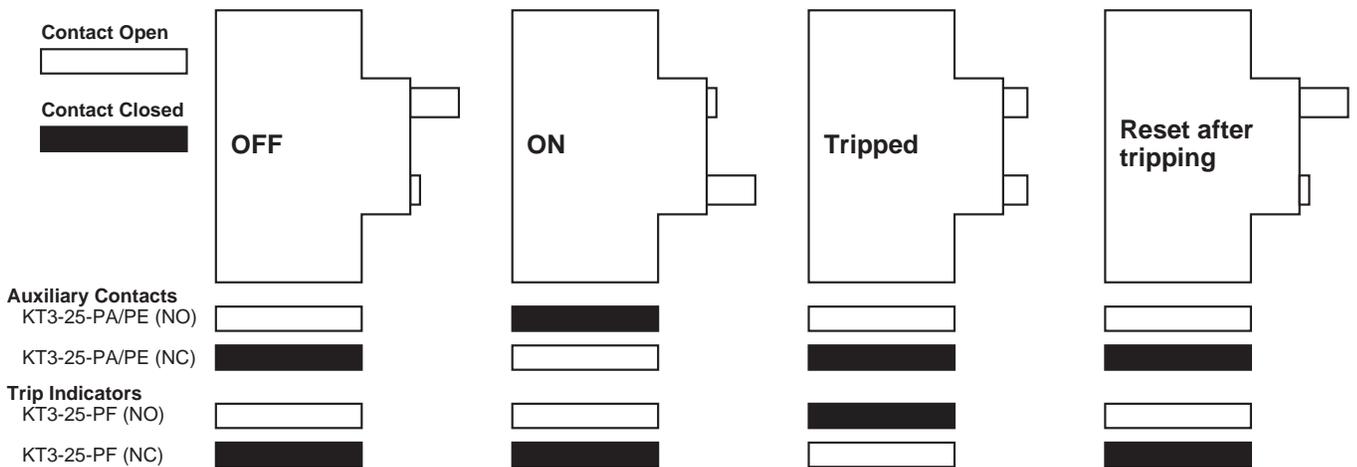
Mounting Position - KTA3-100



IEC Performance Data (KTA3-25)

	KTA3-25 0.16A	KTA3-25 0.25A	KTA3-25 0.4A	KTA3-25 0.63A	KTA3-25 1A	KTA3-25 1.6A	KTA3-25 2.5A	KTA3-25 4A	KTA3-25 6.3A	KTA3-25 10A	KTA3-25 16A	KTA3-25 20A
Switching of standard three phase motors												
AC-2, AC-3												
230/240V [kW]	~	~	~	0.06/0.09	0.09/0.12	0.18/0.25	0.37	0.55/0.75	1.1/1.5	1.5/3.0	3.7/4.0	5.5
400/415V [kW]	0.02	0.04	0.06/0.09	0.09/0.12	0.18/0.37	0.37/0.55	0.55/0.75	1.1/1.5	2.2/2.5	3.0/5.5	5.5/7.5	7.5/10
500V [kW]	~	~	~	0.25	0.37	0.55/0.75	1.1	1.5/2.2	2.5/3.0	3.7/6.3	7.5/10	11
690V [kW]	~	~	~	0.25	0.37/0.55	0.75/1.1	1.5	2.2/3.0	3.7/4.0	5.5/7.5	10/12.5	15/16
Back-up fuses												
gG, aM, only if $I_{cc} > I_{cu}$												
230/240V [A]	~	~	~	~	~	~	~	~	~	~	125	125
400/415V [A]	~	~	~	~	~	~	~	~	~	125	125	125
500V [A]	~	~	~	~	~	~	~	~	100	100	100	100
690V [A]	~	~	~	~	~	~	50	50	63	80	80	80
Ultimate short-circuit breaking capacity I_{cu}												
230/240V [kA]	100	100	100	100	100	100	100	100	100	100	30	20
400/415V [kA]	100	100	100	100	100	100	100	100	100	20	10	8
500V [kA]	100	100	100	100	100	100	100	100	30	6	6	6
690V [kA]	100	100	100	100	100	100	4.5	8	8	4.5	3	3
Rated service short-circuit breaking capacity I_{cs}												
230/240V [kA]	100	100	100	100	100	100	100	100	100	100	20	16
400/415V [kA]	100	100	100	100	100	100	100	100	100	16	6	6
500V [kA]	100	100	100	100	100	100	100	100	20	6	4.5	4.5
690V [kA]	100	100	100	100	100	100	4.5	6	6	3	3	3

Auxiliary Contact & Trip Indicator Contact Development



IEC Performance Data (KTA3-100)

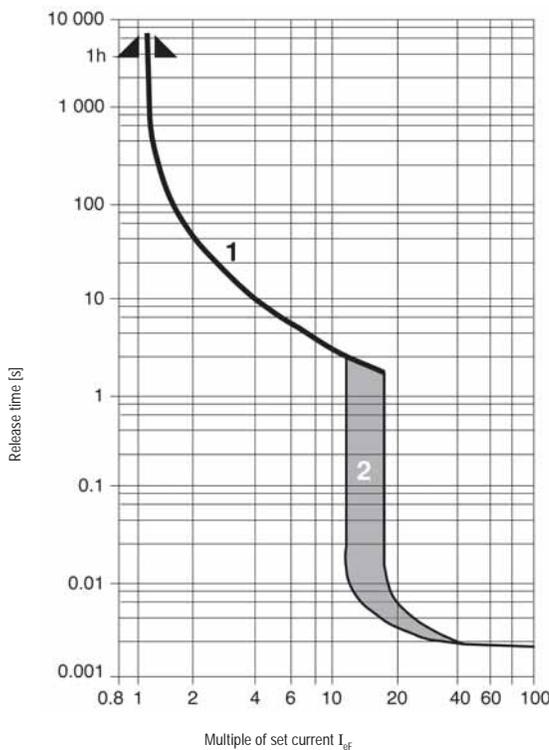
		KTA3-100			
		25A	40A	63A	90A
Switching of standard three phase motors					
AC-2, AC-3					
230/240V	[kW]	5.5/7.5	10/11	12.5/20	22/25
400/415V	[kW]	7.5/12.5	15/22	25/31.5	37/45
500V	[kW]	11/16	18.5/25	30/40	45/55
690V	[kW]	15/22	25/30	37/55	63/75
Back-up fuses					
gG, aM, only if $I_{cc} > I_{cu}$					
230/240V	[A]	~	~	~	~
400/415V	[A]	160	160	160	160
500V	[A]	160	160	160	160
690V	[A]	160	160	160	160
Ultimate short-circuit breaking capacity I_{cu}					
230/240V	[kA]	100	100	100	100
400/415V	[kA]	65	65	65	50
500V	[kA]	50	30	30	25
690V	[kA]	15	8	8	6
Rated service short-circuit breaking capacity I_{cs}					
230/240V	[kA]	100	100	100	100
400/415V	[kA]	65	50	50	25
500V	[kA]	50	25	25	13
690V	[kA]	15	6	6	6

Time/Current Characteristic - KTA3-25 and KTA3-100

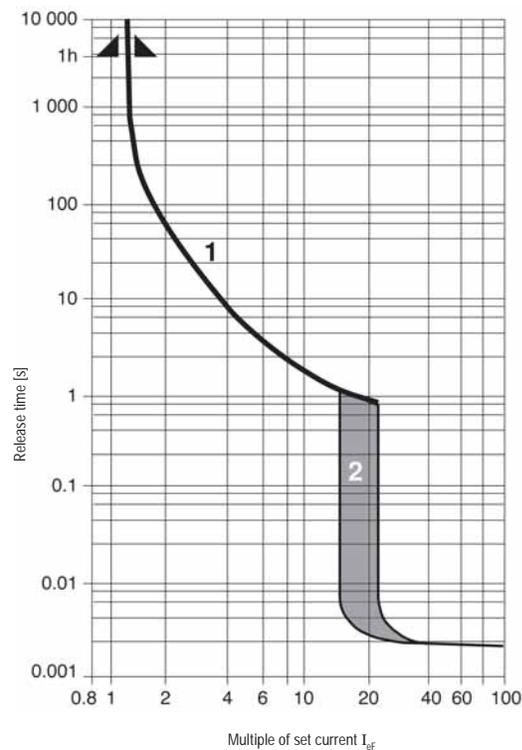
- 1) Thermal Trip Response Current**
The curves below show the mean trip time at a 20°C ambient temperature and starting from a cold state. With operationally warm devices the trip time of the thermal trip drops to 1/4 of the values read. Accurate adjustment of the overload ensures effective motor protection.
- 2) Magnetic Trip Response Current**
The electromagnetic, non-delayed high-speed trip (< 2/1000 of a second) reacts to a fixed response current. At the upper setting of the device, this is 11 times the set current for KTA3-25 and 14 times the set current for the KTA3-100; at a lower setting it is correspondingly greater.

A Note on European (export) Applications:
The KTA may be applied as a circuit breaker that meets European IEC standards. When applied as a circuit breaker at 3Kw or less, the KTA3-25 complies with VDE0165/83, section 6.1.4.3.3 which requires that protection equipment must ensure motor protection even in the event of phase failure. Additional protection devices must be applied above 3Kw to ensure motor protection in the event of phase failure. The KTA3-100 meets these conditions for all rated loads. All KTA devices meet the requirements for a thermal release for a starter in accordance with IEC 947. Applications exceeding those specified may require adjustment to the operational current. KTA devices also meet CE requirements. Consult your Sprecher + Schuh representative if you have additional questions about compliance with European standards.

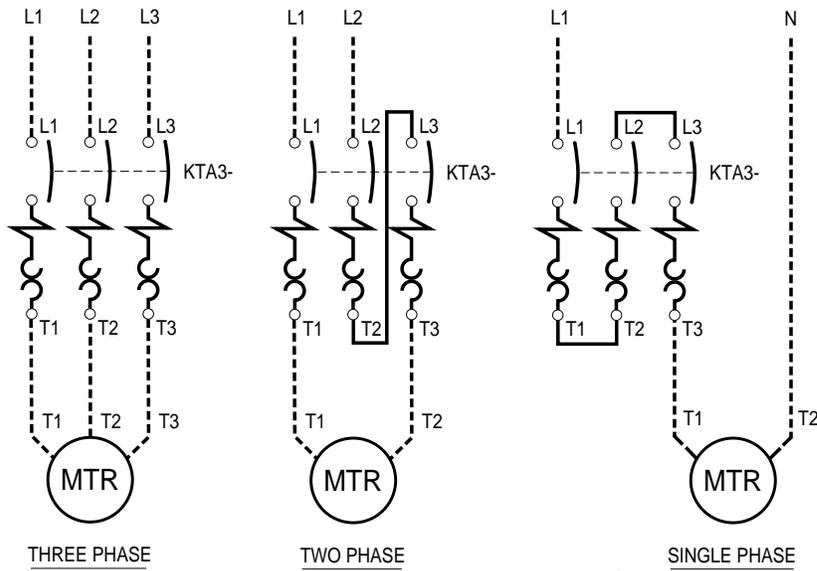
Time/Current Curve - KTA3-25



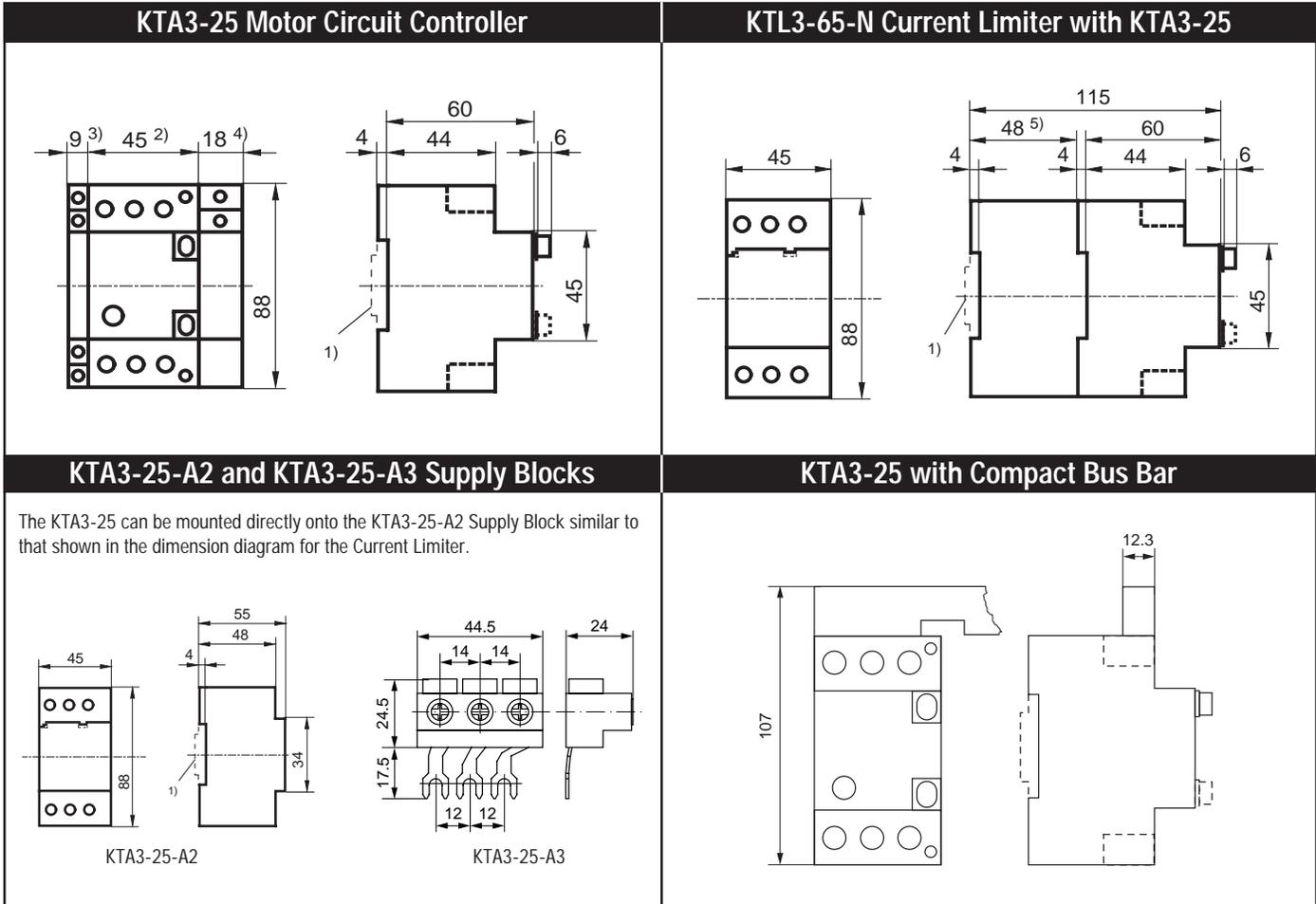
Time/Current Curve - KTA3-100



Single, Two and Three Phase Connection Diagram



Dimensions in millimeters except where noted



- 1) DIN rail (EN 50022-35)
- 2) KTA3-25 w/KT3-25-PE or KT3-25-PF
- 3) KT3-25-PA
- 4) KT3-25-AA or KT3-25-UA
- 5) KTL3-65-N

Dimensions in millimeters except where noted

