KT4 Manual Motor Starter









Ideal for use as a manual starter

The KT4 is a manual motor starter that employs the features of power switching, thermal overload protection and control circuit signaling in one compact unit. This manual motor starter has the advantage of a high speed magnetic trip mechanism which limits the let-through current under short-circuit conditions. The KT4 can be supplied with field installable shunt trip or an under voltage trip unit which exceeds the capabilities of the classic manual motor starter. This manual motor starter is available in a variety of enclosures including general purpose, watertight and explosion proof (the most compact on the market today).

KT4 Reduces panel space and saves money in Group Motor Installations

The KT4 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 according NEC 430-53c 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 KT4 line offers a wide application range from 0.1 to 16 FLA in installations up to 600V. For group motor applications, the KT4 series has a 250A group installation rating, with a withstand rating as high as 42 KAIC.

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 2/1000 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 letthrough current is significantly reduced and the potential for damage is limited.

Because each KT4 is individually calibrated at the factory for the smallest and largest current, very accurate thermal overload protection is also obtained. In addition, the KT4 is a Class 10 device ... it trips within 10 seconds under a locked rotor condition (6 x FLA). Every KT4 Manual Motor Starter is equipped with automatic ambient temperature compensation, which continually adjusts to surrounding temperatures. As a result, trip times remain constant and accurate.

Accessories add versatility

Whether in group motor installations or as a manual motor starter, numerous field installable accessories are available to enhance the KT4's performance:

- Auxiliary Contact Blocks are available for internal or external mounting providing signal switching capability for control circuits.
- Shunt trip and Undervoltage Release Modules provides the ability to remotely actuate the KT4 in emergency situations or continuously monitor the line voltage.
- Enclosures are available in general protection (IP41), or watertight (IP55), complete with lockable accessories.
- Compact Bus Bar System reduces the task of line side wiring in multiple motor starter installations which reduces the labor cost of installation.





KT4 Manual Motor Starter •

	Maximum Horsepower 0 ❷							Ordering Informa	tion 0
Single	Single Ø 2 Three Ø		O/L Relay Ampere	Magnetic Response					
115V	230V	200V	230V	460V	575V	Response 4	Current	Catalog Number	Price
~	~	~	~	~	~	0.1 - 0.16	1.8	KT4-C2A-A16	197.25
~	~	~	~	~	~	0.16 - 0.25	2.8	KT4-C2A-A25	197.25
~	~	~	~	~	~	0.25 - 0.4	4.4	KT4-C2A-A40	197.25
~	~	~	~	~	~	0.4 - 0.63	6.9	KT4-C2A-A63	225.86
~	~	~	~	~	1/2	0.63 - 1.0	11	KT4-C2A-B10	225.86
~	1/10	~	~	1/2	3/4	1.0 - 1.6	18	KT4-C2A-B16	225.86
1/10	1/6	1/2	1/2	1	1-1/2	1.6 - 2.5	28	KT4-C2A-B25	225.86
1/8	1/3	3/4	3/4	2	3	2.5 - 4.0	44	KT4-C2A-B40	225.86
1/4	1/2	1	1-1/2	3	5	4.0 - 6.3	69	KT4-C2A-B63	225.86
1/2	1-1/2	2	3	5	7-1/2	6.3 - 10	110	KT4-C2A-C10	225.86
1	2	3	5	10	10	10 - 16	176	KT4-C2A-C16	258.57

Short Circuit Ratings

	Manual Motor Starter / Group Installation Ratings						
Catalog Number	Short Circuit	t Rating (kA)	Maximum Branch Circuit Protection Rating 6				
	480V	600V	Amperes				
KT4-C2A-A16	42	42	250				
KT4-C2A-A25	42	42	250				
KT4-C2A-A40	42	42	250				
KT4-C2A-A63	42	42	250				
KT4-C2A-B10	42	42	250				
KT4-C2A-B16	42	42	250				
KT4-C2A-B25	42	10	250				
KT4-C2A-B40	18	5	250				
KT4-C2A-B63	18	5	250				
KT4-C2A-C10	10	5	250				
KT4-C2A-C16	10	5	250				

• Horsepower ratings shown are the maximum rating of the switching capacity of the main contactors. 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 1.15

Select catalog number KT4-C2A-A63 (Range 4.0-6.3 Amps)

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 1.0 Multiplier 0.9 Effective Current 3.78A

Select catalog number KT4-C2A-A40 (Range 2.5-4.0 Amps)

- 2 Single phase horsepower ratings are based on wiring the 3 poles of the device in
- 1 The KT4 motor circuit controller is approved for use in group installation according to NEC 430-53C. Reference Sprecher+Schuh UL file #E54612.
- 4 The actual trip current is 120% of the dial setting.
- **6** Although UL Testing of Manual Motor Starters allows for Group Installation with upstream Branch Circuit Protection maximum ratings as high as 250 amperes; it should be noted that NEC 2002 contains new restrictions under NEC 430-53D "Single Motor Taps". KT4 should be applied as outlined in NEC 430-53D-1 or 430-53-D-2 to be in compliance. KT4 does not qualify as "Tap Conductor Protection" as required under NEC 430-53-D-3. Please refer to the Application notes located at the end of the KT7 section for more details on compliance.





Accessories for KT4

Accessory	Description	Wiring Diagram	Catalog Number	Price
W. (4)	Auxiliary Contact Block (NO) - mounts internally.	13	KT4-C-AEA10	22.48
	Auxiliary Contact Block (NO) - mounts internally, terminal markings appropriate when also using "PA" type auxiliary contact.	33	KT4-C-AEA210	22.48
	Auxiliary Contact Block (NC) - mounts internally.	11	KT4-C-AEA01	22.48
33	Auxiliary Contact Block (NC) - mounts internally, terminal markings appropriate when also using "PA" type auxiliary contact.	31	KT4-C-AEA201	22.48
9	Two pole Auxiliary Contact Block (NO/NC) - for side mounting. If using Compact Bus Bar System, choose bus bar with 54mm spacing	13 21	KT4-C-ASA11	41.90
PA -02	Two pole Auxiliary Contact Block - (NO/NO) - for side mounting. If using Compact Bus Bar System, choose bus bar with 54mm spacing.	13 23	KT4-C-ASA20	41.90
	Two pole Auxiliary Contact Block - (NC/NC) - for side mounting. If using Compact Bus Bar System, choose bus bar with 54mm spacing.	11 21 7 7 7 7 7 7 7 7 7	KT4-C-ASA02	41.90

Accessory	Description	Catalog Number	Price
○ = ↑ ○	Adaptor Plate Provides capability to base mount one KT4	KT4-C-N12	17.37
	Locking Fixture Padlocking attachment for one KT4-25. Locks in the OFF position only. Metal construction. Holds one to three padlocks with 6mm hasps.	KT4-C-M3	17.37





Accessories for KT4 (continued from previous page)

A	Description	Wisiaa Diaasa	AC Coil	Voltage	Ostolou Novebou	Dulas		
Accessory	Description	Wiring Diagram	50 HZ	60 HZ	Catalog Number	Price		
			24V	~	KT4-C-UXK			
-			~	24V	KT4-C-UXJ			
9			~	48V	KT4-C-UXX			
		D1 D2	110V	110V	KT4-C-UXKD			
D1 D2	Undervoltage Release Module	F1 U<	110V	120V	KT4-C-UXD			
	- mounts on right hand side, Prevents KT4 from operating		220230V	240260V	KT4-C-UXF	99.13		
UA PHILAS	unless voltage is present.	<u> </u>	~	240260V	KT4-C-UXA			
0000		Q1 🕌	240V	277V	KT4-C-UXT			
900			400V	460V	KT4-C-UXN			
2			415V	480V	KT4-C-UXB			
			500V	575V	KT4-C-UXM			
			24V	~	KT4-C-SXK			
-			~	24V	KT4-C-SXJ			
9			~	48V	KT4-C-SXX			
		C1 C2	110V	110V	KT4-C-SXKD			
CI	Shunt Release Module -	F1	110V	120V	KT4-C-SXD			
	mounts on right hand side.		220230V	240260V	KT4-C-SXF	99.13		
0000	Remotely trips the KT4 .		~	240260V	KT4-C-SXA			
		Q1 🕌	240V	277V	KT4-C-SXT			
			400V	460V	KT4-C-SXN			
			415V	480V	KT4-C-SXB			
			500V	575V	KT4-C-SXM			

Accessory	Description	Voltage / Rated Current	Catalog Number	Price
	Connecting Module ●- Provides a solid "wireless" connection between a KT4 Motor Circuit Controller and a CA7 contactor. Connects CA7-923	20A	KT4-C-PNC23	18.40

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Accessories for KT4 (continued from previous page)

Accessory	Description	Enclosure Rating	Catalog No. •	Price
	Enclosures for Surface Mounting -	General Purpose (IP41)	KT4-C-EA41	74.61
KT4-C-EA55	Includes ground and neutral terminals.	Watertight (IP55)	KT4-C-EA55	132.86
KT4-C-EE55	Enclosure for Flush Mounting - includes protective earth	General Purpose (IP41)	KT4-C-EE41	41.90
	and neutral wire terminals.	Watertight (IP55)	KT4-C-EE55	52.12
	Enclosure Locking Fixture - Holds one to three padlocks with 6mm hasps.	For use with KT4-C-EA41 and KT4-C-EA55 enclosures	KT4-C-M3E	17.37
17.	Enclosure Membrane - Replacement membrane. Includes 4 mounting screws (membrane only, does not include mounting frame).	For replacement on KT4-C-EA55 or -EE55 or to upgrade KT4-C-EA41 or -EE41 enclosures	KT4-C-N55	

Accessory	Description	Kit Catalog No.	Kit Price	For Use With	Assembled Cat No. •	Price
0				KT4-C-EA41	KT4-C-MT-EA41	133.88
	Emergency Stop Kit	KT4-C-MT	47.01	KT4-C-EE41	KT4-C-MT-EE41	102.20
	Twist-To-Release			KT4-C-EA55	KT4-C-MT-EA55	196.22
KT4-C-MT-EA55				KT4-C-EE55	KT4-C-MT-EE55	110.38
\odot				KT4-C-EA41	KT4-C-MK-EA41	162.50
	Emergency Stop Kit Key Release	VTA C MV	75 60	KT4-C-EE41	KT4-C-MK-EE41	130.82
		KT4-C-MK	75.63	KT4-C-EA55	KT4-C-MK-EA55	225.86
KT4-C-MK-EA55				KT4-C-EE55	KT4-C-MK-EE55	138.99

[•] KT4 Manual Motor Starter Not Included. Consult a Sprecher + Schuh representative for an assembly including a KT4.





Compact Bus Bar System for KT4

sprecher+ schuh

Accessory	Description	Catalog Number	Price
TO THE RESIDENCE OF THE PARTY O	Compact Bus Bar - 45mm spacing - Bus bar with 45mm spacing accepts KT4's with or without internally mounted auxiliary or trip signal contact. Rated to 65A (UL)/63A (IEC). Connects two KT4's Connects three KT4's Connects four KT4's Connects five KT4's	KT4-C-W452 KT4-C-W453 KT4-C-W454 KT4-C-W455	40.88 47.01 53.14 58.25
Ann han	Compact Bus Bar - 54mm spacing - Bus bar with 54mm spacing accepts KT4's with side mounted auxiliary contact (type PA-11). Rated to 65A (UL)/63A (IEC). Connects two KT4's Connects three KT4's Connects four KT4's Connects five KT4's	KT4-C-W542 KT4-C-W543 KT4-C-W544 KT4-C-W545	40.88 47.01 53.14 58.25
	Supply Block - Provides connection from bus bar to power.	KT4-C-WT	37.81
	Blank Space Cover - Covers bus bar connections where no KT4 is mounted.	KT4-C-WS	6.13

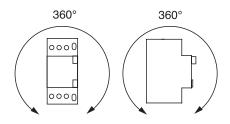




Technical Information

Lloyd's Register of Shipping, Maritime Register of Shipping, RINA, KEMA		,	KT4
UL, CSA, CE, SEV, Germ. Lloyd, CEBEC, PTB, DEMKO, SEMKO, SETI, NEMKO, BURKO, SEMKO, SETI, NEMKO, Bureau Veritas Lloyd's Register of Shipping, Maritime Register of Shipping, RINA, KEMA Approvals / Markings Rated Insulation Voltage IEC, SEV, VDE0660 IV. 690 Gereating Semantia Conditions Rated Insulation Voltage Main circuits Auxiliary cir	Standards Approvals		
Rated Insulation Voltage IEC, SEV, VDE0660 [V] 690 600			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
IEC, SEV, VDE0660	Approvals / Markings		CE, cULus Listed
UL, CSA	Rated Insulation Voltage		
Main circuits	IEC, SEV, VDE0660	[V]	690
Main circuits		[V]	600
Auxiliary circuits	Rated Impulse Withstand Voltage		
Rated Prequency [Hz] 4060	Main circuits		6 kV
Rated Operating Current Life Mechanical [operations] Electrical [operations] 50,000 Switching Frequency			6 kV
Life Mechanical [operations] 100,000 Switching Frequency Ambient Temperature Storage Operation Sesistance to climatic change Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Tripping Time Phase failure protection Temperature Compensation Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 1. conductor 2. conductor 1. to 6 mm² / 16 to 12 AWG 1. conductor		[Hz]	-
Mechanical [operations] 100,000 50,000 Max. 30 operating cycles/hour	Rated Operating Current	[A]	0.116 (11 ranges)
Electrical [Operations] 50,000 Max. 30 operating cycles/hour Ambient Temperature Storage -25°C to +80°C Operation -25°C to +60°C Resistance to climatic change Humid heat 40°C, 92%, 56 days Alternating climatic conditions 23°C, 83%/40°C, 93%, 56 cycles Degree of Protection IP20 (when wired) Impact Resistance (shock) Vibration Strength Frequency Range 10150Hz In all directions Overload Protection Tripping Time Class 10 Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 1 to 4 mm² / 16 to 12 AWG 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG	Life		
Switching Frequency Ambient Temperature Storage Operation Resistance to climatic change Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Mechanical	[operations]	100,000
Ambient Temperature Storage Operation Resistance to climatic change Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conduct	Electrical	[operations]	50,000
Storage Operation Resistance to climatic change Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Overload Protection Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Screwdriver 1. conductor T. conductor	Switching Frequency		Max. 30 operating cycles/hour
Operation -25°C to +60°C Resistance to climatic change Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Overload Protection Tripping Time Phase failure protection Temperature Compensation Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Ambient Temperature		
Resistance to climatic change Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Phase failure protection Temperature Compensation Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 2. conductor 1. conductor 2. conductor 2. conductor 1. conductor 2. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Storage		-25°C to +80°C
Humid heat Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor	Operation		-25°C to +60°C
Alternating climatic conditions Degree of Protection Impact Resistance (shock) Vibration Strength Frequency Range In all directions Overload Protection Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Resistance to climatic change		
Impact Resistance (shock) 50g, 11ms	Humid heat		40°C, 92%, 56 days
Impact Resistance (shock) 50g, 11ms	Alternating climatic conditions		23°C, 83%/40°C, 93%, 56 cycles
Impact Resistance (shock) 50g, 11ms	Degree of Protection		IP20 (when wired)
Frequency Range In all directions Overload Protection Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 1. conductor 2. conductor 1. conductor			
In all directions Overload Protection Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Vibration Strength		
Overload Protection Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Manual motor starter at rate	Frequency Range		10150Hz
Tripping Time Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	In all directions		>7.5g
Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Overload Protection		
Phase failure protection Temperature Compensation Magnetic Response Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 1. conductor 2. conductor 1. conductor	Tripping Time		Class 10
of upper rated current) Magnetic Response 11 x /e max. (fixed setting) (/e max. = max value of the setting range) Total Power dissipation Manual motor starter at rated load [W] 7 Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1 to 4 mm² / 16 to 12 AWG 1. conductor 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1. conductor 1. to 6 mm² / 16 to 12 AWG	Phase failure protection		See time/current curve
Magnetic Response 11 x /e max. (fixed setting) (/e max. = max value of the setting range) Total Power dissipation Manual motor starter at rated load [W] 7 Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. to 4 mm² / 16 to 12 AWG 1. conductor 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1. conductor 1. to 6 mm² / 16 to 12 AWG	Temperature Compensation		-20°C +60°C (70°C=15% current reduction
Total Power dissipation Manual motor starter at rated load Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor 2. conductor 1. conductor	·		of upper rated current)
Total Power dissipation Manual motor starter at rated load [W] 7 Terminal Connections Type of terminals Screwdriver Position No. 2/Blade No. 3 1. conductor 1 to 4 mm² / 16 to 12 AWG 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG	Magnetic Response	'	11 x /e max. (fixed setting)
Manual motor starter at rated load [W] 7 Terminal Connections Type of terminals Screwdriver 1. conductor 2. conductor 1. to 4 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1. conductor 1. to 6 mm² / 16 to 12 AWG 1. conductor 1. to 6 mm² / 16 to 12 AWG			(/e max. = max value of the setting range)
Terminal Connections Type of terminals Position No. 2/Blade No. 3	Total Power dissipation		
Type of terminals Screwdriver Position No. 2/Blade No. 3 1. conductor 2. conductor 1 to 4 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1.5 to 6 mm² / 16 to 12 AWG	Manual motor starter at rated load	[W]	7
Screwdriver Position No. 2/Blade No. 3	Terminal Connections	<u> </u>	炭
1. conductor 2. conductor 1 to 4 mm² / 16 to 12 AWG 2. conductor 1 to 4 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1.5 to 6 mm² / 16 to 12 AWG	Type of terminals		
1. conductor 2. conductor 1 to 4 mm² / 16 to 12 AWG 2. conductor 1 to 4 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1.5 to 6 mm² / 16 to 12 AWG	Screwdriver		Position No. 2/Blade No. 3
2. conductor 1 to 4 mm² / 16 to 12 AWG 1. conductor 1 to 6 mm² / 16 to 12 AWG 2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1.5 to 6 mm² / 16 to 12 AWG		1. conductor	
2. conductor 1 to 6 mm² / 16 to 12 AWG 1. conductor 1.5 to 6 mm² / 16 to 12 AWG		2. conductor	1 to 4 mm ² / 16 to 12 AWG
1. conductor 1.5 to 6 mm ² / 16 to 12 AWG		1. conductor	1 to 6 mm ² / 16 to 12 AWG
		2. conductor	1 to 6 mm ² / 16 to 12 AWG
2 conductor 1.5 to 6 mm ² / 16 to 1.2 AWG		1. conductor	1.5 to 6 mm ² / 16 to 12 AWG
2. Conductor 1.5 to 0 mm / 10 to 12 AWG		2. conductor	1.5 to 6 mm ² / 16 to 12 AWG

Mounting Position - KT4



Weights

Description	Catalog Number	Weight
Manual Motor Starter	KT4-C2A	290 g
Auxiliary Contact Blocks for Flush Mounting	KT4-C-AEA	12 g
Auxiliary Contact Blocks for Left-side Mounting	KT4-C-ASA	35 g
Undervoltage Release	KT4-C-UX	104 g
Shunt Release	KT4-C-SX	100 g
Bus Bar Feeder Terminal	KT4-C-WT	36 g
	KT4-C-W452	42 g
	KT4-C-W453	69 g
	KT4-C-W454	94 g
Commont Due Don	KT4-C-W455	119 g
Compact Bus Bar	KT4-C-W542	45 g
	KT4-C-W543	76 g
	KT4-C-W545	104 g
	KT4-C-W545	135 g
Blank Space Cover	KT4-C-WS	3.3 g
Emergency-Stop	KT4-C-MT	g
Push Button	KT4-C-MK	g
Enclosure for Surface Mounting	KT4-C-EA41	250 g
Enclosure for Flush Mounting	KT4-C-EA55	258 g
Button Membrane	KT4-C-EE41	126 g
Bullon Weinbrane	KT4-C-EE55	134 g
Indicator Light	KT4-L	10 g
Hut (DIM) roil Adoptor	KT4-C-N12	16 g
Hut (DIN) rail Adapter	KT4-C-M3E	19 g
Locking Arrangement	KT4-C-M3	11 g

2 to 2.5 Nm / 18 to 22 fb-in

Tightening torque





Technical Information

Specifications of Accessorie	KT4-C-AEA Auxiliary Contact Block for Flush Mounting			KT4-C-ASA Auxiliary Contact Block for Left-side Mounting						
Rated Thermal Current Ith										
at 40°C ambient temperature	[A]		6	3			1	0		
at 60°C ambient temperature	[A]			1			6	3		
Contact Class Coordination Acc	ording	to NEMA								
(UL/CSA Standards)	[AC] [DC]	l	600 Standa R 300 Ligh		•	В	600 Standa R 300 Ligh		ty	
Back-Up Fuses gG, gL	[A]		1	6		16				
Rated Supply current	[V]	230/240	400/415	500	690	230/240	400/415	500	690	
AC-15	[A]	2	1	0.8	0.5	2	1	0.8	0.5	
DC-13	[V]	24	48	110	220	24	48	110	220	
	[A]	2	0.6	0.2	0.1	2	0.6	0.2	0.1	
Terminal Parts Type of terminals Screwdriver				Do	zidrivo No. 1	2 / Blade No				
1. conductor		0.75	to 2.5 mm?			0.75 to 2.5 mm2 / 18 to 14 AWG			VMC	
2. conductor		0.75 to 2.5 mm2 / 18 to 14 AWG 0.75 to 2.5 mm2 / 18 to 14 AWG			0.75 to 2.5 mm2 / 18 to 14 AWG					
1. conductor 2. conductor		0.75	to 4 mm2	/ 18 to 14 /	AWG	0.75 to 4 mm2 / 18 to 14 AWG			AWG	
		0.75	to 4 mm2	/ 18 to 14 /	AWG	0.75	to 4 mm2	/ 18 to 14 /	AWG	
1. conductor		0.75	to 4 mm2	/ 18 to 14 /	AWG	0.75 to 4 mm2 / 18 to 14 AWG			AWG	
2. conductor		0.75	to 4 mm2	/ 18 to 14 /	AWG	0.75	0.75 to 4 mm2 / 18 to 14 AWG			
Tightening torque		1	to 1.5 Nm /	9 to 13 fb-	in	1 to 1.5 Nm / 9 to 13 fb-in				

		KT4-C-UX Undervoltage Release Unit for Right-side Mounting	KT4-C-SX Shunt Release for Right-side Mounting	KT4-C-WT Supply Block		
Actuating Voltage						
Pull-in		0.8 to 1.1 x <i>U</i> _s	0.7 to 1.1 x <i>U</i> _s			
Drop-out		0.7 to 0.35 x <i>U</i> _s	~			
Rated Control Voltage	min.	12V 50 Hz, 14V 60 Hz	12V 50 Hz, 14V 60 Hz			
	max.	600V 50 Hz	600V 50 Hz			
On-Time		100 %	100%			
Coil Rating	Pull-in	8.5 VA, 6 W	8.5 VA, 6 W			
	Hold	3 VA, 1.2 W	3 VA, 1.2 W			
Terminal Parts						
Type of terminals						
Screwdriver		Pozidrive No. 2/Blade No. 3	Pozidrive No. 2/Blade No. 3	Pozidrive No. 2/Blade No. 3		
1. conductor		0.75 to 2.5 mm ² / 18 to 14 AWG	0.75 to 2.5 mm ² / 18 to 14 AWG	4 to 16 mm ² / 14 to 6 AWG		
2. conductor		0.75 to 2.5 mm ² / 18 to 14 AWG	0.75 to 2.5 mm ² / 18 to 14 AWG	4 to 16 mm ² / 14 to 6 AWG		
1. conductor		0.75 to 4 mm ² / 18 to 14 AWG	0.75 to 4 mm ² / 18 to 14 AWG	4 to 16 mm ² / 14 to 6 AWG		
2. conductor		0.75 to 4 mm ² / 18 to 14 AWG	0.75 to 4 mm ² / 18 to 14 AWG	4 to 16 mm ² / 14 to 6 AWG		
1. conductor		0.75 to 4 mm ² / 18 to 14 AWG	0.75 to 4 mm ² / 18 to 14 AWG	4 to 16 mm ² / 14 to 6 AWG		
2. conductor		0.75 to 4 mm ² / 18 to 14 AWG	0.75 to 4 mm ² / 18 to 14 AWG	4 to 16 mm ² / 14 to 6 AWG		
Tightening torque		1 to 1.5 Nm / 9 to 13 fb-in	1 to 1.5 Nm / 9 to 13 fb-in	4 Nm / 36 fb-in		

		KT4-C-W45 Compact Bus Bar	KT4-C-W54 Compact Bus Bar
Rated Insulation Voltage U_i	[V]	690	690
Rated Thermal Current / _{th}	[A]	63	63

		KT4-C-EA41 / -EE41 Enclosure	KT4-C-EA55 / -EE55 Enclosure	KT4-C-L Indicator Light
IP Protection		IP41	IP55 (with seal and protective membrane)	IP54
Ambient Temperature	[°C]	- 25+ 40	- 25+ 40	~
Rated Operating Voltage	[V]	~	~	120, 240, 415, 480





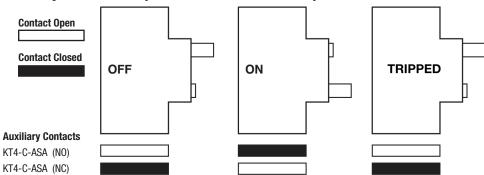
IEC Performance Data (KT4-C2A)

		-A16	-A25	-A40	-A63	-B10	-B16	-B25	-B40	-B63	-C10	-C16
Switching of standard t	three phase n	notors										
AC-2, AC-3												
230/240V	[kW]	~	~	~	0.06/0.09	0.12	0.18/0.25	0.37	0.55/0.75	1.1/1.5	2.2	3.0/4.0
400/415V	[kW]	0.02	0.06	0.09	0.18/.25	0.25	0.37/0.55	.75	1.1/1.5	2.2	3.0/4.0	5.5/7.5
500V	[kW]	~	~	~	0.18	0.25/0.37	0.55/0.75	1.1	1.5/2.2	2.5/3.0	4.0/6.3	7.5/10
690V	[kW]	~	~	~	0.25	0.37/0.55	0.75/1.1	1.8	2.2/3.0	~	~	~
Back-up fuses												
gG, aM, only if Icc > Icu												
230/240V	[A]							~	~	~	~	50
400/415V	[A]			No Fuere	Danwinad			~	~	~	63	50
500V	[A]			No Fuses	Required			~	~	63	50	50
690V	[A]							25	35	~	~	~
Ultimate short-circuit b	reaking capa	city <i>I</i> cu										
230/240V	[kA]	65	65	65	65	65	65	50	50	50	50	3
400/415V	[kA]	65	65	65	65	65	65	50	10	10	8	6
500V	[kA]	50	50	50	50	50	50	50	3	10	4.5	4.5
690V	[kA]	50	50	50	50	50	50	4.5	2	~	~	~

CSA Performance Data (KT4-C2A)

		-A16	-A25	-A40	-A63	-B10	-B16	-B25	-B40	-B63	-C10	-C16
Maximum short-circu	uit current											
480V	[kA]	42	42	42	42	42	42	42	18	18	10	5
600V	[kA]	42	42	42	42	42	42	10	5	5	5	5
Motor load	•											
1-phase												
115V	[HP]	~	~	~	~	~	~	1/10	1/8	1/4	1/2	1
230V	[HP]	~	~	~	~	~	1/10	1/6	1/3	3/4	1 1/2	3
3-phase												
200V	[HP]	~	~	~	~	~	~	1/2	3/4	1 1/2	2	3
230V	[HP]	~	~	~	~	~	~	3/4	1	2	3	5
460V	[HP]	~	~	~	~	1/2	1	1 1/2	3	5	7 1/2	10
575V	[HP]	~	~	~	~	3/4	1	2	3	5	10	15

Auxiliary Contact & Trip Indicator Contact Development o

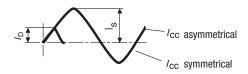


KT4 leaves the factory in the Auto Reset mode. This means the Off and Trip positions are the same.
 If a true trip position is required, consult your Sprecher + Schuh representative.

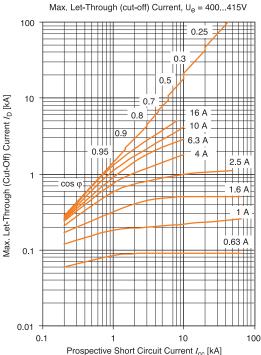




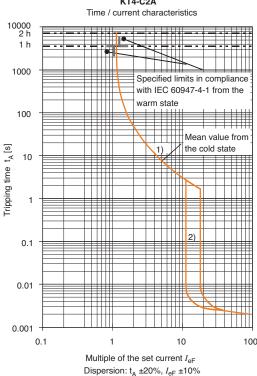




KT4-C2A



KT4-C2A

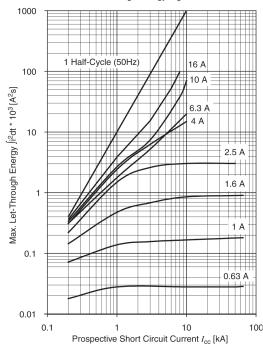


The KT4-C2A manual motor starter limits short-circuit current I_{cc} (prospective shortcircuit current). I_0 is the maximum cut-off current (highest instantaneous value of the limited short-circuit current). This value is indicated in the following diagram as a function of the system short-circuit current.

Correspondingly the maximum forward j^2 dt energy is limited. This value is indicated in the following diagram as a function of the system short-circuited current.

KT4-C2A





1) Operating Current of Thermal Releases:

The adjustable inverse bimetal trip reliability protects motors against overloads. The curve shows the mean operating current at an ambient temperature of 20°C starting from cold.

In equipment at operating temperature, release time is less than or equal to release time from the cold state.

2) Operating Current of Magnetic Releases:

Electromagnetic instantaneous releases react at a fixed tripping current.

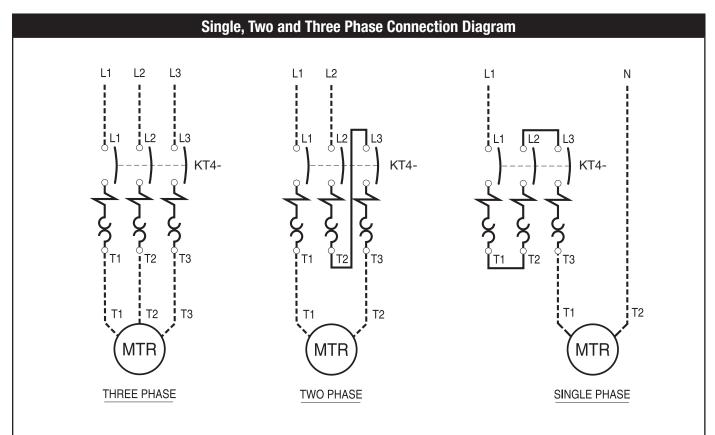
At the upper thermal release setting, this tripping current is 11 times the set cur rent.

Current To Be Set:

Thermal releases meet the requirements for a thermal release of a starter in accordance with IEC 60947-4-1 f. If a different value is specified (such as reduced I in motors with an ambient temperature higher than 40°C or a site altitude >2000 m above sea level), the rated operating current / must be adjusted.



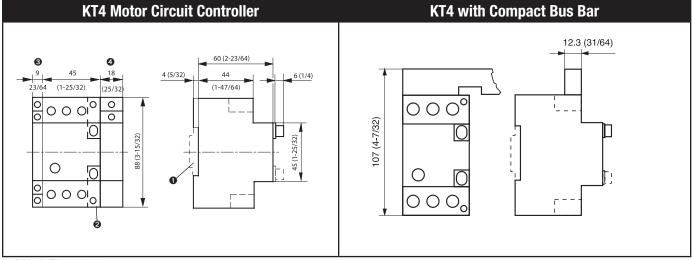




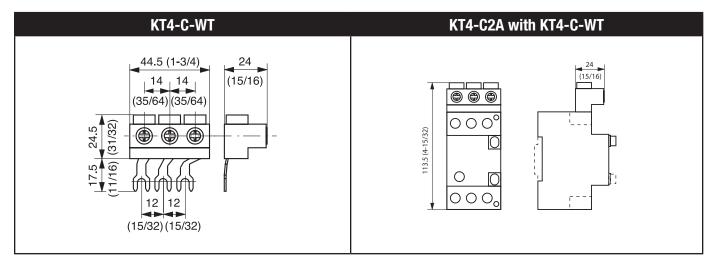


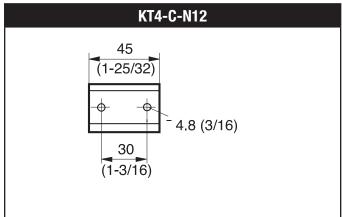


Dimensions are in millimeters (except where noted). Dimensions not intended for manufacturing purposes.



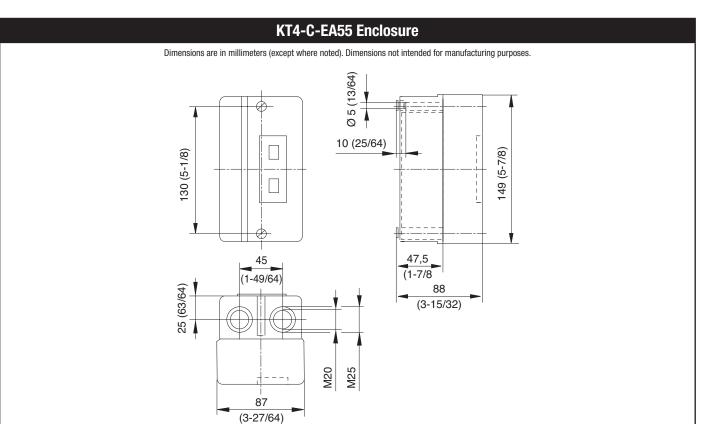
- DIN rail (EN 50022-35)
- KT4 w/KT4-C-AEA (no dimension change)
- **⊗** KT4-C-ASA
- KT4-C-SXB or KT4-C-UXA



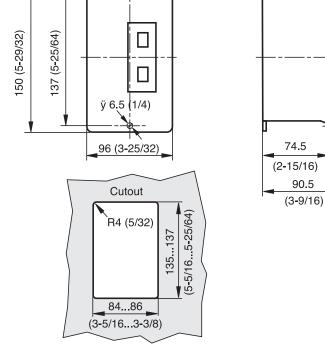








KT4-C-EE41 Enclosure





Notes	