

Motor Protection Circuit Breakers KT7 to KT9

Product Migration Guide

 SMART Motor Control



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Why upgrade or migrate?

While the KT7 Motor Protection Circuit Breaker has been a valuable part of NHP's Motor Control and Protection Portfolio for over 20 years, this product has been discontinued, with limited stock remaining.

Now is the time to migrate from KT_7 (25S/32S and 25H/32H frame) to the KT9 Motor Protection Circuit Breaker equivalent. The balance of the KT_7 series, the 45H frame, will continue to remain available up to 45A.

KT9 features and benefits

- KTA9-32S frame is up to 32A and KT_9-40H frame is extending current range up to 40A
- Higher short circuit ratings and application coverage for KT_9-40H
- Improved thermal performance compared to existing product line (lower heat loss)
- Different product variants (KTB9 MCP, KTC9 High inrush version) are covered by single frame size KT_9-40H
- Lockable knob and anti-tamper shield as standard offering for KT_9-40H
- Trip class 10 (KTA9, KTC9)
- Connecting modules and combination SCCR tested with CA7 and CA8 contactors
- Common electromechanical and expansion accessories
- Expanded certifications
- New auxiliaries and accessories

Now is the time to migrate to the KT9 Motor Protection Circuit Breaker

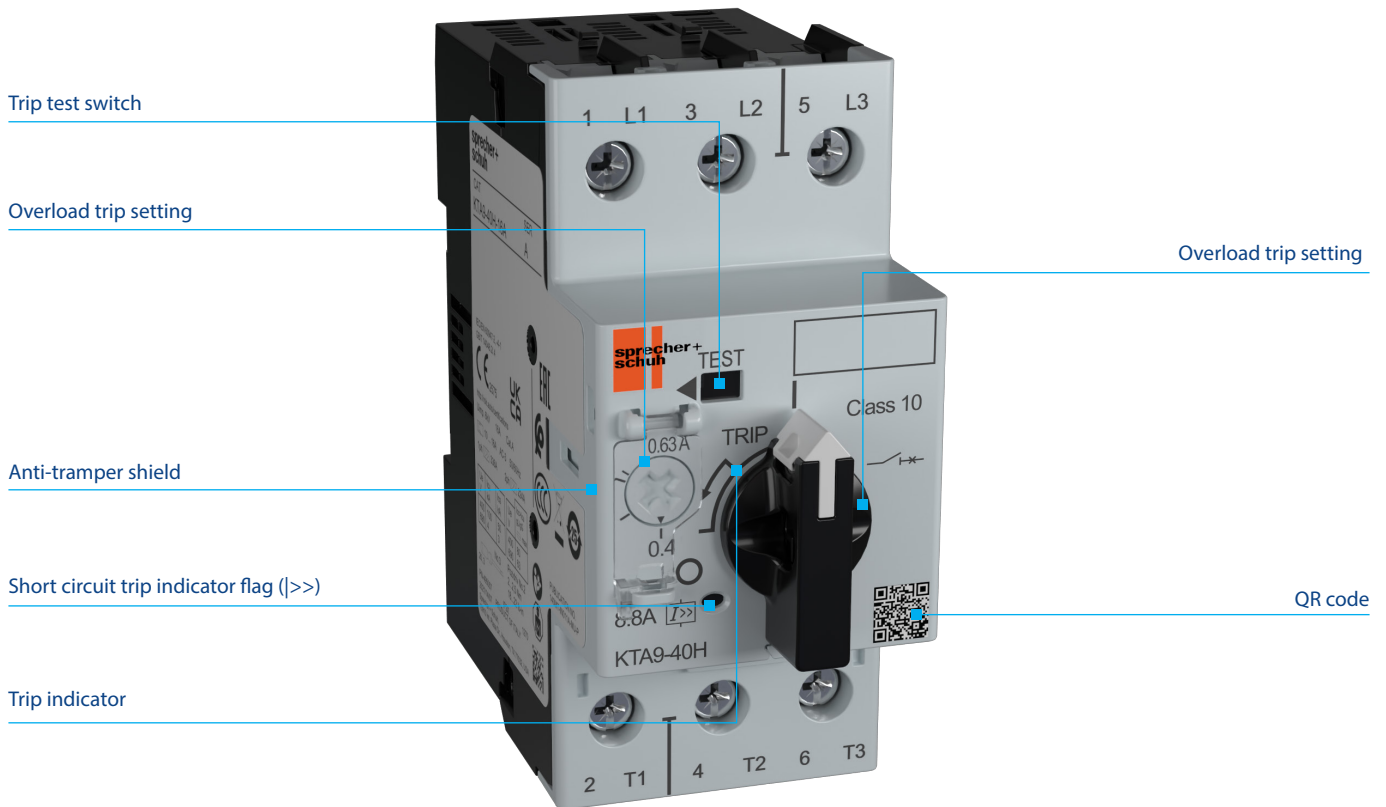


Obsolete KT7



KT9 series

Features overview



Product line variants

KT9 C frame 0.1-32A

- KTA9-32S

KT9 D frame 0.1-40A

- KTA9-40H
- KTB9-40H
- KTC9-40H
- Standard lockable knob
- Standard ant-tamper shield



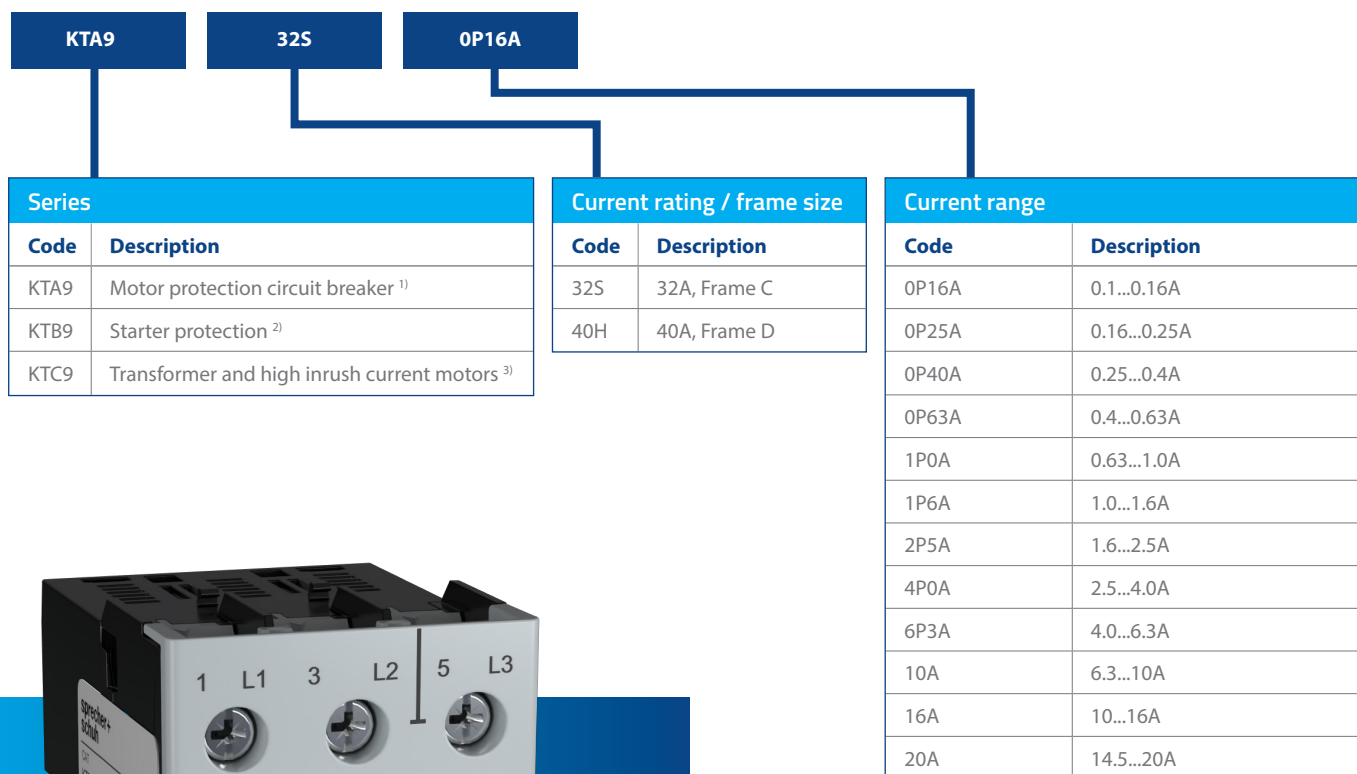
KT9 C frame 0.1-32A



KT9 D frame 0.1-40A

Catalogue number construction

This chart provides a general guide to creating a KT9 catalogue number to match your application. Not all possible combinations are valid.



1) Adjustable Thermal / Fixed Magnetic MPCB; 14x In up to 32A, 12x In for 36A and 40A

2) Fixed Magnetic MCP; 14x In up to 32A, 12x In for 36A and 40A

3) Adjustable Thermal / Fixed Magnetic MPCB; 18...22x In for all models

Product enhancements

- 32S frame is up to 32A and 40H frame is extending current range up to 40A
- Improved thermal performance compared to existing product line (lower heat loss)
- Different product variants (MCP, high inrush versions) are covered by single frame size 40H
- Lockable knob and anti-tamper shield as standard offering for 40H frame
- Connecting modules and combination SCCR tested with CA7 and CA8 contactors

Product line comparison



Series	KT5	KT_7 25/32S	KTA9 32S	KT_7 25/32H	KT_9 40H	KT_7 45H
Frame size	-	C frame	C frame	D frame	D frame	F frame
Dimensions (W x H x D) (mm)	45 x 90 x 85.5 ¹⁾	45 x 92 x 75	45 x 96 x 84	45 x 92 x 85	45 x 96 x 94	54 x 111 x 115
Current range	0.1...32A	0.1...32A	0.1...32A	1.6...32A	0.4...40A	6.3...45A
Short circuit protection	✓	✓	✓	✓	✓	✓
Standard magnetic trip	✓	KTA7, KTB7	KTA9	KTA7, KTB7	KTA9, KTB9	KTA7, KTB7
High magnetic trip	-	KTC7	-	KTA7	KTC9	KTC7
Magnetic-only trip (Motor circuit protector)	-	KTB7	-	KTB7	KTB9	KTB7
Overload protection	✓	✓	✓	✓	✓	✓
Trip class	10A	10A	10A	10A	10A	10A
Phase loss sensitivity	✓	✓	✓	✓	✓	✓
Short circuit indication	-	✓	✓	✓	✓	✓
Accessories (optional)						
External rotary operator	✓	✓	✓	✓	✓	✓
Auxiliary contacts	✓	✓	✓	✓	✓	✓
Trip indication contacts	✓	✓	✓	✓	✓	✓
Undervoltage release	✓	✓	✓	✓	✓	✓
Shunt release	✓	✓	✓	✓	✓	✓
Insulated three-phase busbar	✓	✓	✓	✓	✓	✓
Connecting modules for CA7 contactors	✓	✓	✓	✓	✓	✓
Connecting modules for CA8 contactors	✓	✓	✓	-	-	-
Lockable knob	✓	✓	✓	✓	Standard	✓
Anti-tamper cover	✓	✓	✓	✓	Standard	✓

1) Dimension is up to 16A. Dimensions for 20...32A: 45 x 96.8 x 85.5

Frequently asked questions

Are KT7 and KT9 dimensions the same and will I need to change my drawings for mounting?

KT9 device height and depth are different but the width is the same, so replacement should be easier. Please see dimensions in technical data sheet or CAD drawings for further information.

Are all the existing variants' replacements available?

Yes all the variants are available for KT9 and all of these are available in D frame size. Please refer to the component cross-reference tables on following page for replacement part numbers.

Are the auxiliaries and accessories the same as KT7?

KT9 auxiliaries and accessories are different to KT7. Please refer to the component cross-reference tables on following page for replacement part numbers.

Is there a complete technical specification available for the KT9?

Complete technical specification is available at nhp.com.au / nhpnz.co.nz or by contacting your local NHP Account Representative.

Are connecting modules for KT9 MPCB to Sprecher + Schuh contactor product lines available?

Yes, we have various types and ratings of connecting modules available for connecting KT9 with CA7 and CA8 contactors.

What should I do if I am using KT_7 45H (F frame) size?

KT_7 45H (F frame) is not being discontinued, so please continue using KT_7 45H frame devices.

Can I replace one KT7 in an existing panel with KT9 when KT7 are installed with compact busbars (KT7-32-DB-*)?**

KT7 and KT9 terminal heights are different, so KT7 cannot be replaced directly when installed with line-side compact busbars (KT7-32-DB-***).

Type 2 co-ordination for KT9?

For Type 2 co-ordination charts, please contact your local NHP Account Representative.

Component cross-reference tables

Thermal and magnetic motor protection

Standard range

KTA7-25S/32S existing		KTA9-32S new product
KTA7-25S-0.16A	KTA7-25S-0P16A	KTA9-32S-0P16A
KTA7-25S-0.25A	KTA7-25S-0P25A	KTA9-32S-0P25A
KTA7-25S-0.4A	KTA7-25S-0P4A	KTA9-32S-0P40A
KTA7-25S-0.63A	KTA7-25S-0P63A	KTA9-32S-0P63A
KTA7-25S-1A		KTA9-32S-1P0A
KTA7-25S-1.6A	KTA7-25S-1P6A	KTA9-32S-1P6A
KTA7-25S-2.5A	KTA7-25S-2P5A	KTA9-32S-2P5A
KTA7-25S-4A		KTA9-32S-4P0A
KTA7-25S-6.3A	KTA7-25S-6P3A	KTA9-32S-6P3A
KTA7-25S-10A		KTA9-32S-10A
KTA7-25S-16A		KTA9-32S-16A
KTA7-25S-20A		KTA9-32S-20A
KTA7-25S-25A		KTA9-32S-25A
KTA7-32S-29A		KTA9-32S-29A
KTA7-32S-32A		KTA9-32S-32A

High performance range

KTA7-25S/32S existing		KTA9-40H new product
-		KTA9-40H-0P63A
-		KTA9-40H-1P0A
-		KTA9-40H-1P6A
KTA-25H-2.5A	KTA-25H-2P5A	KTA9-40H-2P5A
KTA7-25H-4A		KTA9-40H-4P0A
KTA7-25H-6.3A	KTA7-25H-6P3A	KTA9-40H-6P3A
KTA7-25H-10A		KTA9-40H-10A
KTA7-25H-16A		KTA9-40H-16A
KTA7-25H-20A		KTA9-40H-20A
KTA7-25H-25A		KTA9-40H-25A
KTA7-25H-29A		KTA9-40H-29A
KTA7-25H-32A		KTA9-40H-32A
-		KTA9-40H-36A
-		KTA9-40H-40A

Thermal magnetic type with high set magnetic (transformer or high inrush motor protection)

Standard range

KTC7 high inrush version		KTC9 high inrush version
KTC7-25S-0.16A	KTC7-25S-0P16A	KTC9-40H-0P16A
KTC7-25S-0.25A	KTC7-25S-0P25A	KTC9-40H-0P25A
KTC7-25S-0.4A	KTC7-25S-0P4A	KTC9-40H-0P4A
KTC7-25S-0.63A	KTC7-25S-0P63A	KTC9-40H-0P63A
KTC7-25S-1A		KTC9-40H-1P0A
KTC7-25S-1.6A	KTC7-25S-1P6A	KTC9-40H-1P6A
KTC7-25S-2.5A	KTC7-25S-2P5A	KTC9-40H-2P5A
KTC7-25S-4A		KTC9-40H-4P0A
KTC7-25S-6.3A	KTC7-25S-6P3A	KTC9-40H-6P3A
KTC7-25S-10A		KTC9-40H-10A
KTC7-25S-16A		KTC9-40H-16A
KTC7-25H-16A		-
KTC7-25H-20A		KTC9-40H-20A
-		KTC9-40H-25A

High performance range

KTC7 high inrush version	KTC9 high inrush version
KTC7-25H-16A	-
KTC7-25H-20A	KTC9-40H-20A
-	KTC9-40H-25A

Magnetic starter protection

Standard range

KTB7 MCP version		KTB9 MCP version
KTB7-25S-0.16A	-	KTB9-40H-0P16A
KTB7-25S-0.25A	KTB7-25S-0P25A	KTB9-40H-0P25A
KTB7-25S-0.4A	KTB7-25S-0P4A	KTB9-40H-0P40A
KTB7-25S-0.63A	KTB7-25S-0P63A	KTB9-40H-0P63A
KTB7-25S-1A		KTB9-40H-1P0A
KTB7-25S-1.6A	KTB7-25S-1P6A	KTB9-40H-1P6A
KTB7-25S-2.5A	KTB7-25S-2P5A	KTB9-40H-2P5A

High performance range

KTB7 MCP version		KTB9 MCP version
KTB7-25H-2.5A	KTB7-25H-2P5A	-
KTB7-25H-4A		KTB9-40H-4P0A
KTB7-25H-6.3A	KTB7-25H-6P3A	KTB9-40H-6P3A
KTB7-25H-10A		KTB9-40H-10A
KTB7-25H-16A		KTB9-40H-16A
-		KTB9-40H-20A
KTB7-25H-25A		KTB9-40H-25A
KTB7-25H-32A		KTB9-40H-32A
-		KTB9-40H-36A
-		KTB9-40H-40A

Auxiliary contacts

KT7	KT9	Functional options
KT7-PE1-01	KT9-PE1-11	
KT7-PE1-02	#N/D	KT9-PA1-02
KT7-PE1-10	KT9-PE1-10	
KT7-PE1-11	KT9-PE1-11	
KT7-PE1-20	KT9-PE1-20	
KT7-PEF1-S10/N01	KT9-PEF1-S10N01	
KT7-PEF1-S10/N10	KT9-PEF1-S10N10	
KT7-PA1-02	KT9-PA1-02	
KT7-PA1-11	KT9-PA1-11	
KT7-PA1-20	KT9-PA1-20	
KT7-PAF1-M11	#N/D	KT9-PEF1-S10N01
KT7-PAF1-S01/M01	#N/D	
KT7-PAF1-S01/M10	#N/D	KT9-PEF1-S01N10
KT7-PAF1-S10/M01	#N/D	
KT7-PAF1-S10/M10	#N/D	KT9-PEF1-S10N10

Shunt trip release

KT7	KT9
KT7-AA-24VAC	KT9-AA-24V
KT7-AA-110VAC	KT9-AA-120V
KT7-AA-240VAC	KT9-AA-277V
KT7-AA-415VAC	KT9-AA-480V
KT7-AA-24VDC	KT9-AA-24D

Undervoltage release

KT7	KT9
KT7-UA-24VAC	KT9-UA-24V
KT7-UA-110VAC	KT9-UA-120V
KT7-UA-240VAC	#N/D
KT7-UA-415VAC	KT9-UA-480V
KT7-UA-24VDC	#N/D

Other installation accessories

KT7	KT9
KT7-25-CA	KT9-CA
KT7-HTFCN	KT9-HTFCN
KT7-HTFCRY	KT9-HTFCRY
KT7-HTN	KT9-HTN
KT7-HTC	KT9-DNC
KT7-HTRY	KT9-HTRY
KT7-HT	KT9-HT
KT7-HTL	KT9-HTL
KT7-KN1	KT9-KN
KT7-KRY1	KT9-KRY
KT7-DS	KT9-M3
KT7-45-AS	KT9-N45
KT7-SHS	KT9-SHS
KT7-SB	KT9-SB
KT7-SY	KT9-SY
KT7-S1	KT9-S1
KT7-S2	KT9-S2
KBH2	KT9-KBH
-	KT7-HTS
KT7-25-TE1	KT9-40-TE

Other installation accessories

KT7	KT9
KT7-32-DB-45-2	KT9-40-DB-45-2
KT7-32-DB-45-3	KT9-40-DB-45-3
KT7-32-DB-45-4	KT9-40-DB-45-4
KT7-32-DB-45-5	KT9-40-DB-45-5
KT7-32-DB-54-2	KT9-40-DB-54-2
KT7-32-DB-54-3	KT9-40-DB-54-3
KT7-32-DB-54-4	KT9-40-DB-54-4
KT7-32-DB-54-5	KT9-40-DB-54-5
KT7-25-A2E	KT9-40-A2E
KT7-32-DBA	KT9-40-DBA
KT7-25-A3E	KT9-40-A3E
KT7-32-A3E	
KT7-25S-PEC23	KT9-32S-PEC23
KT7-25S-PEC23A	#N/D
KT7-25S-PEK12	KT9-32S-PEK12
KT7-25S-PKC23	"KT9-32S-PNC23 + KT9-32S-PSC23"
KT7-25S-PNC23	KT9-32S-PNC23
KT7-25S-PSC23	KT9-32S-PSC23
KT7-25H-PEC23	KT9-40H-PEC23
KT7-25H-PNC23	KT9-40H-PNC23
KT7-25H-PNC37	KT9-40H-PNC37



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