ENERGY AND AUTOMATION K SERIES, SLOTTED LEVER, 1 BOTTOM CABLE ENTRY. DIMENSIONS TO EN 50047, METAL BODY, CONTACTS 2NO+1NC SLOW ACTION



Product type designation         KMQ           General characteristics         Aluminium-zinc allow           Contact characteristics         NO+1NC Slow action           Contact characteristics         2NO+1NC Slow action           Type of contact         Aluminium-zinc allow           Thermal current lth         A         10           EC/EN 60947-5-1 designation         A         10           Rated insulation voltage Ui         V         440           Rated insulation voltage Uinp         KV         4           Short-circuit protection with fuse         Class/A         10 gG/SC QUICK FUSE           Switching speed         min         m/s         0.5           max         m/s         1.5         10 gG/SC QUICK FUSE           Switching speed         min         m/s         1.0           Resistance per pole (average value)         mΩ         <10           OperationS         gG/SC         100000           B10d         cycles         100000           Mechanical life         cycles         100000           Mechanical life         cycles         100000           Mechanical life         cycles         100000           Operating head fixing         Locking bayonet insert					
General characteristics       Atuminium-zinc alloy         Housing Material       Atuminium-zinc alloy         Contact characteristics       2NO+1NC Slow action         Type of contact       A 10         Thermal current lth       A 10         EIC/EN 60947-5-1 designation       A300 Q300         Rated insulation voltage Ui       V 440         Rated insulation voltage Uinp       kV 4         Short-circuit protection with fuse       Class/A         Switching speed       min         max       m/s         Mechanical life       cycles         Operations       cycles         Mechanical life       cycles         Operation       43600         Operations       cycles         Mechanical life       cycles         Operating head fixing       Locking bayonet insert         Operating torque       Nm         Operating torque (Max)       Switch fixing         Tightening torque (Max)       Switch fixing         Mody lid screw fixing       Nm         Operating torque (Max)       Nm         AWG/Kcmil       Nm	Product designation				Slotted lever
General characteristics       Aluminium-zinc alloy         Contact characteristics       2NO+1NC Slow action         Type of contact       2NO+1NC Slow action         Thermal current lth       A         EC/CIN 609/75-1 designation       A 300 0300         Rated insulation voltage Ui       V         Short-circuit protection with fuse       Class/A         Switching speed       min         max       m/s         Desistance per pole (average value)       mQ         Operation       cycles         Mechanical life       cycles         Operation       cycles         Mechanical life       cycles         Operations       cycles         Mechanical life       cycles         Operations       cycles         Mechanical life       cycles         Operating head fixing       Locking bayonel insert         Operating head fixing       15         Contact terminals       m         Machanical life       cycles         Operating head fixing       2.5         Dim       2.5         Insert       2.5         Dim       2.5         Insert       0.8         Dim       2.5	Product type designat	ion			KMQ
Housing Material       Aluminium-zinc allow         Contact characteristics       2NQ+1NC Slow action         Thermal current lth       A       10         EC/EN 60947-5-1 designation       A300 0300         Rated insulation voltage Uin       V       440         Rated insulation voltage Uinp       KV       4         Short-circuit protection with fuse       Class/A       10 gG/SC gUICK FUSE         Switching speed       min       m/s       0.5         EEC Conventional free air thermal current lth       A       10         Resistance per pole (average value)       mΩ       <10					
Housing Material     alloy       Contact characteristics     2NO+1NC Slow action       Thermal current lth     A     10       EC/EN 603/7-5-1 designation     A300 Q300       Rated insulation voltage Ui     V     440       Rated insulation voltage Uinp     KV     4       Short-circuit protection with fuse     Class/A     10 gG/SC QUICK FUSE       Switching speed     min     m/s     1.5       EC Conventional free air thermal current lth     A     10       Resistance per pole (average value)     mQ     <10	General characteristic	S			
Contact characteristics     alloy       Type of contact     2NO+1NC Slow action       Thermal current lth     A     10       IEC/EN 60947-5-1 designation     A 300 Q300       Rated insulation voltage Ui     V     440       Rated insulation voltage Uimp     kV     4       Short-circuit protection with fuse     Class/A     10 gG/SC Class/A       Switching speed     min     m/s     0.5       EC Conventional free air thermal current lth     A     10       Resistance per pole (average value)     mQ     <10	Housing Material				
Type of contact         2NO+1NC Slow action           Thermal current lth         A         10           IEC/EN 60947-5-1 designation         X300 Q300           Rated insulation voltage U         V         440           Rated insulation voltage Uimp         KV         4           Short-circuit protection with fuse         Class/A         10 gG/SC QUICK FUSE           Switching speed         min         m/s         0.5           EC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mΩ         <10	_	2			alloy
1ype of contact         action           Thermal current tth         A         10           EC/EN 60947-5-1 disgnation         X300 Q300           Rated insulation voltage U         V         440           Rated insulation voltage U         V         440           Rated insulation voltage U         V         440           Short-circuit protection with fuse         Class/A         10 gG/SC           Switching speed         min         m/s         0.5           max         m/s         1.5         1           IEC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mΩ					2NO+1NC Slow
IEC/EN 60947-5-1 designation A300 Q300 Rated insulation voltage Ui Rechanical life Rechanical fixing R	Type of contact				
Rated insulation voltage Ui         V         440           Rated inpulse withstand voltage Uimp         kV         4           Short-circuit protection with fuse         Class/A         10 gG/SC QUICK FUSE           Switching speed         min         m/s         0.5           max         m/s         1.5           IEC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mΩ         <10	Thermal current Ith			А	10
Rated impulse withstand voltage Uimp     kV     4       Short-circuit protection with fuse     Class/A     10 gG/SC QUICK FUSE       Switching speed     min     m/%     0.5       max     m/s     1.5       IEC Conventional free air thermal current lth     A     10       Resistance per pole (average value)     mΩ     <10	IEC/EN 60947-5-1 de	signation			A300 Q300
Short-circuit protection with fuse Class/A 10 gG/SC QUICK FUSE Switching speed min m/s 0.5 max m/s 1.5 IEC Conventional free air thermal current lth A 10 Resistance per pole (average value) mQ <10 Operations Mechanical life cycles 100000 B10d cycles/h 3600 Output characteristics Mechanical life cycles 100000 Mechanical features Operating head fixing Class/A 10 Nm 15 Operating torque (Max) Switch fixing Nm 2.5 Ibin 72 Conductor section AWG/Kcmil min 16	Rated insulation voltage	ge Ui		V	440
Sindredical protection with ruse         Class A QUICK FUSE           Switching speed         min         m/s         0.5           max         m/s         1.5           IEC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mQ         <10	Rated impulse withsta	nd voltage Uimp		kV	
min     m/s     0.5       max     m/s     1.5       IEC Conventional free air thermal current lth     A     10       Resistance per pole (average value)     mΩ     <10	Short-circuit protection	n with fuse		Class/A	
max         m/s         1.5           IEC Conventional free air thermal current lth         A         10           Resistance per pole (average value)         mΩ         <10	Switching speed				
IEC Conventional free air thermal current lth A 10 Resistance per pole (average value) mΩ <10 Operations Wechanical life cycles 100000 B10d cycles 100000 Mechanical operation cycles/h 3600 Output characteristics Mechanical features Operating head fixing Locking bayonet insert Operating torque Ncm 15 ozin 21.2 Tightening torque (Max) Switch fixing Nm 2.5 Ibin 22.1 Contact terminals Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16			min		
Resistance per pole (average value)       mΩ       <10			max		
Operations       explain s         Mechanical life       cycles       100000         B10d       cycles       100000         Mechanical operation       cycles       3600         Output characteristics       cycles       100000         Mechanical life       cycles       100000         Operating head fixing       Locking bayonet insert       Insert         Operating torque (Max)       Switch fixing       Nm       11.2         Tightening torque (Max)       Switch fixing       Nm       2.5         Ibin       7       Contact terminals       Nm       0.8         Ibin       7       Conductor section       Nm       0.8         AWG/Kcmil       min       16       Min       16 <td></td> <td></td> <td></td> <td></td> <td></td>					
Mechanical life         cycles         10000           B10d         cycles         10000           Mechanical operation         cycles/h         3600           Output characteristics         wechanical life         cycles         100000           Mechanical features         uechanical features         uechanical features         uechanical features           Operating head fixing         Locking bayonet insert         locking bayonet insert           Operating torque         Ncm         15 ozin         21.2           Tightening torque (Max)         Switch fixing         Nm         2.5         1bin         22.1           Contact terminals         Nm         0.8         1bin         7           Body lid screw fixing         Nm         0.8         1bin         7           Conductor section         AWG/Kcmil         min         16         16		average value)		mΩ	<10
B10d       cycles       100000         Mechanical operation       cycles/h       3600         Output characteristics       mechanical life       cycles       100000         Mechanical features       use       Locking bayonet insert         Operating head fixing       Ncm       15         Operating torque       Ncm       15         Operating torque (Max)       Switch fixing       Nm       2.5         Ibin       22.1       Ibin       22.1         Contact terminals       Nm       0.8         Ibin       7       Sold Screw fixing         AWG/Kcmil       min       16				e vele e	100000
Mechanical operation cycles/h 3600 Output characteristics Mechanical life cycles 100000 Mechanical features Operating head fixing Locking bayonet insert Operating torque Switch fixing Nrm 15 ozin 21.2 Tightening torque (Max) Switch fixing Nrm 2.5 Ibin 22.1 Contact terminals Nrm 0.8 Ibin 7 Body lid screw fixing Nrm 0.8 Ibin 7 Conductor section AWG/Kcmil nrm 16					
Output characteristics       Cycles       100000         Mechanical life       cycles       100000         Mechanical features       Locking bayonet insert         Operating head fixing       Ncm       15 ozin         Operating torque       Ncm       15 ozin         Tightening torque (Max)       Switch fixing       Nm       2.5 lbin         Zontact terminals       Nm       0.8 lbin       7         Body lid screw fixing       Nm       0.8 lbin       7         Conductor section       AWG/Kcmil       min       16					
Mechanical life       cycles       10000         Mechanical features       Locking bayonet insert         Operating head fixing       Locking bayonet insert         Operating torque       Ncm       15 ozin         Tightening torque (Max)       Switch fixing       Nm       2.5         Example 1       Contact terminals       Nm       2.5         Body lid screw fixing       Nm       0.8       lbin       7         Conductor section       AWG/Kcmil       min       16				cycles/fi	3000
Mechanical features       Locking bayonet insert         Operating head fixing       Locking bayonet insert         Operating torque       Ncm       15 ozin         Tightening torque (Max)       Switch fixing       Nm       2.5 lbin         Zontact terminals       Nm       0.8 lbin       7         Body lid screw fixing       Nm       0.8 lbin       7         Conductor section       AWG/Kcmil       min       16				cycles	100000
Operating head fixing       Locking bayonet insert         Operating torque       Ncm       15         Operating torque (Max)       Ncm       21.2         Tightening torque (Max)       Switch fixing       Nm       2.5         Ibin       22.1       Ibin       22.1         Contact terminals       Nm       0.8         Ibin       7       Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7       Ibin       7         Conductor section       AWG/Kcmil       Imin       16				eyelee	100000
Operating read fixing insert Operating torque Operating torque Ncm 15 ozin 21.2 Tightening torque (Max) Switch fixing Nm 2.5 Ibin 22.1 Contact terminals Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16					Locking bayonet
Ncm       15         ozin       21.2         Tightening torque (Max)       Switch fixing         Switch fixing       Nm       2.5         Ibin       22.1         Contact terminals       Nm       0.8         Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7         Conductor section       AWG/Kcmil       Ibin         Min       16	Operating head fixing				
Tightening torque (Max)     Switch fixing     Nm     2.5       Ibin     22.1       Contact terminals     Nm     0.8       Ibin     7       Body lid screw fixing     Nm     0.8       Ibin     7       Conductor section     Nm     16	Operating torque				
Tightening torque (Max)       Switch fixing       Nm       2.5         lbin       22.1         Contact terminals       Nm       0.8         lbin       7         Body lid screw fixing       Nm       0.8         lbin       7         Conductor section       AWG/Kcmil       min       16					
Switch fixing           Switch fixing         Nm         2.5           Ibin         22.1           Contact terminals         Nm         0.8           Ibin         7           Body lid screw fixing         Nm         0.8           Ibin         7           Conductor section         AWG/Kcmil         16				ozin	21.2
Nm 2.5 Ibin 22.1 Contact terminals Mm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16	Tightening torque (Ma				
Ibin       22.1         Contact terminals       Nm       0.8         Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7         Conductor section       AWG/Kcmil       16		Switch fixing			
Contact terminals       Nm       0.8         Ibin       7         Body lid screw fixing       Nm       0.8         Ibin       7         Conductor section       AWG/Kcmil       min         AWG/Kcmil       min       16					
Nm 0.8 Ibin 7 Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16		Contact terminals		IDIN	ZZ.1
Ibin     7       Body lid screw fixing     Nm     0.8       Ibin     7       Conductor section     AWG/Kcmil       min     16		Contact terminals		Nm	0.9
Body lid screw fixing Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16					
Nm 0.8 Ibin 7 Conductor section AWG/Kcmil min 16		Body lid screw fixing			
Lbin 7 Conductor section AWG/Kcmil min 16				Nm	0.8
Conductor section AWG/Kcmil min 16					
AWG/Kcmil min 16	Conductor section				
		AWG/Kcmil			
max 14			min		16
			max		14



ENERGY AND AUTOMATION

KMQ1L21 electric LIMIT SWITCH, K SERIES, SLOTTED LEVER, 1 BOTTOM CABLE ENTRY. DIMENSIONS TO EN 50047, METAL BODY, CONTACTS 2NO+1NC SLOW ACTION

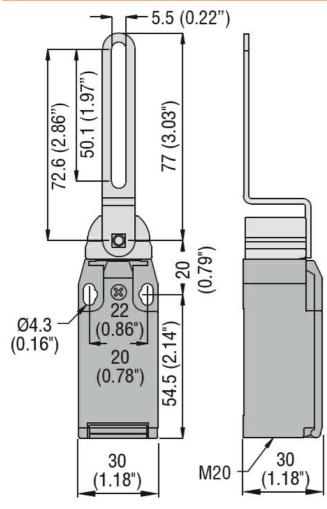
max

°C

+70

	IEC			
		min	mm²	1or 2
		max	mm²	2.5
Cable connection				Self-releasing screw terminal
Cable entry				M20 on the bottom
Ambient conditions				
Pollution degree				3
Temperature				
	Operating temperature			
		min	°C	-25
		max	°C	+70
	Storage temperature			
		min	°C	-40





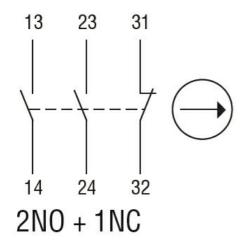
## Wiring diagrams

KMQ1L21



ENERGY AND AUTOMATION

Slow action



Certifications and	compliance	
Compliance		
	CSA C22.2 n° 14	
	EN 50047	
	IEC/EN 60204-1	
	IEC/EN 60947-1	
	IEC/EN 60947-5-1	
	UL508	
Certificates		
	CCC	
	cULus	
	EAC	
ETIM classification	n	
		EC000030 - End

ETIM 8.0

switch