

A) @

KUHP Series Panel Relay

AC coils 6 to 277VAC 50/60Hz, DC 6 to 110VCD

- Contact arrangement up to 2 form C (CO)
- 250" combination push-on/solder terminals or PC terminals
- Side flange and top flange mounting
- Designed to meet VDE space requirements: Class B coil insulation



Typical applications

Commercial HVAC, smart-grid communications controllers, baggage handling, pumps.

Approvals

UL E22575; CSA LR15734 Technical data of approved types on request

Contact Data1 pole2 poleContact arrangement1 form C (CO)2 form A (NO)1 form A (NO)2 form B (NC)Rated voltage240VACRated voltage240VACRated current30A20AContact materialAgCdOAgCdO, AgSnOlnOMin. recommended contact load300mA, 12VDCInitial contact resistance200mΩ200mΩPrequency of operation360 ops./hour360 ops./hourOperate/release time max.20/20ms20/20msBounce time max.20ms20msContacts ratingsTypeLoadTypeLoad100x10³ ops.1 hPl, 120VAC100x10³ ops.1 hPl, 120VAC100x10³ ops.30A, 28 VDC50x10° ops.30A, 28 VDC50x10° ops.10A, 480VAC25x10° ops.1/2HP, 480VAC25x10° ops.1/2HP, 480VAC100x10° ops.2 pole, AgCdO20A, 240VAC2 pole AgSnOlnO <t< th=""><th>lechnical data of a</th><th>pproved types on reques</th><th>st.</th><th></th></t<>	lechnical data of a	pproved types on reques	st.	
1 form A (NO) 2 form A (NO) 1 form B (NC) 2 form B (NC) Rated voltage 240VAC Rated current 30A 200mΩ 200mΩ Min. recommended contact load 300mA, 12VDC Initial contact resistance 200mΩ Prequency of operation 360 ops./hour Operate/release time max. 20/20ms Bounce time max. 20/20ms 20ms 20ms Contacts ratings Type Load Type Load 1 1/2HP, 240VAC 100x10° ops. 1 1/2HP, 240VAC 100x10° ops. 1 1/2HP, 480VAC 50x10° ops. 1 1/2HP, 480VAC 25x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 480VAC 50x10° ops. 20A, 240VAC 100x10° ops. 20A, 240VAC 100x10° ops. 20A, 240VAC 25x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 480VAC 25x10° ops. <	Contact Dat	a		
1 form B (NC) 2 form B (NC) Rated voltage 240VAC 240VAC Rated current 30A 20A Contact material AgCdO AgCdO, AgSnOlnO Min. recommended contact load 300mA, 12VDC 300mA, 12VDC Initial contact resistance 200mΩ 200mΩ Frequency of operation 360 ops./hour 360 ops./hour Operate/release time max. 20/20ms 20/20ms Bounce time max. 20/20ms 20ms Contacts ratings 20ms 20ms Type Load Cycles 1 hole, AgCdO 100x10 ³ ops. 11/2HP, 240VAC 1 bole, AgCdO 100x10 ³ ops. 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 102x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 50x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 20A, 240VAC 100x10 ³ ops. 20A, 240VAC 100x10 ³ ops. 20A, 240VAC 50x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops.	Contact arrange	ement	1 form C (CO)	2 form C (CO)
Rated voltage 240VAC 240VAC Rated current 30A 20A Contact material AgCdO AgCdO, AgSOInO Min. recommended contact load 300mA, 12VDC 300mA, 12VDC Initial contact resistance 200mΩ 200mΩ Frequency of operation 360 ops./hour 360 ops./hour Operate/release time max. 20/20ms 20/20ms Bounce time max. 20ms 20ms Contacts ratings Type Load Cycles 1 pole, AgCdO 100x10 ³ ops. 11/2HP, 240VAC 100x10 ³ ops. 30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 2 pole, AgCdO 20 A, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA			1 form A (NO)	2 form A (NO)
Rated current30A20AContact materialAgCdOAgCdO, AgSnOlnOMin. recommended contact load300mA, 12VDC300mA, 12VDCInitial contact resistance200mQ200mQPrequency of operation360 ops./hour360 ops./hourOperatir/release time max.20/20ms20/20msBounce time max.20/20ms20/20msTypeLoadCycles1 pole, AgCdO30A, 240VAC100x10³ ops.1 HP, 120VAC100x10³ ops.11/2HP, 240VAC30 FLA, 96 LRA100x10³ ops.30A, 28 VDC30A, 28 VDC50x10³ ops.1/2HP, 480VAC1/2HP, 480VAC25x10³ ops.1/2HP, 600VAC25x10³ ops.2 pole, AgCdO20A, 240VAC100x10³ ops.2 pole, AgCdO20A, 240VAC50x10³ ops.2 pole, AgCdO20A, 240VAC50x10³ ops.2 pole, AgCdO20A, 240VAC50x10³ ops.2 pole AgSnOlnO20 A, 240 VAC25x10³			1 form B (NC)	2 form B (NC)
Contact materialAgCdOAgCdO, AgSnOlnOMin. recommended contact load300mA, 12VDC300mA, 12VDCInitial contact resistance200mQ200mQFrequency of operation360 ops./hour360 ops./hourOperate/release time max.20/20ms20/20msBounce time max.20ms20msContacts ratingsTypeLoadCycles1 pole, AgCdO100x10³ ops.1 hP, 120VAC100x10³ ops.1 hP, 120VAC100x10³ ops.1 hP, 120VAC100x10³ ops.30 FLA, 96 LRA100x10³ ops.30A, 28 VDC50x10³ ops.10A, 480VAC6x10³ ops.1/2HP, 480VAC25x10³ ops.1/2HP, 480VAC100x10³ ops.1/2HP, 480VAC100x10³ ops.2 pole, AgCdO20A, 240VAC20 FLA, 83 LRA100x10³ ops.20 FLA, 83 LRA100x10³ ops.1/2HP, 480VAC50x10³ ops.20 FLA, 83 LRA100x10³ ops.1/2HP, 480VAC6x10³ ops.20 FLA, 83 LRA100x10³ ops.1/2HP, 480VAC6x10³ ops.1/2HP, 480VAC25x10³ ops.20 FLA, 83 LRA100x10³ ops.1/2HP, 480VAC25x10³ ops.20 FLA, 83 LRA100x10³ ops.1/2HP, 480VAC25x10³ ops.20 A, 240 VAC25x10³ ops.<	Rated voltage		240VAC	240VAC
Min. recommended contact load 300mA, 12VDC 300mA, 12VDC Initial contact resistance 200mΩ 200mΩ Frequency of operation 360 ops./hour 360 ops./hour Operate/release time max. 20/20ms 20/20ms Bounce time max. 20ms 20ms Contacts ratings 20ms 20ms Type Load Cycles 1 pole, AgCdO 100x10³ ops. 100x10³ ops. 1 HP, 120VAC 100x10³ ops. 300 FLA, 96 LRA 100x10° ops. 300 FLA, 96 LRA 100x10° ops. 300 A, 28 VDC 50x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 600VAC 25x10° ops. 1/2HP, 480VAC 100x10° ops. 2 pole, AgCdO 100x10° ops. 3/4HP, 120VAC 100x10° ops. 2 pole, AgCdO 100x10° ops. 3/4HP, 120VAC 100x10° ops. 2 pole, AgCdO 20A, 240VAC 100x10° ops. 2/20A, 28 VDC 50x10° ops. 2 pole, AgCdO 102HP, 600VAC 25x10° ops. 2/20A, 28 VDC 50x10° ops.				
Initial contact resistance $200m\Omega$ $200m\Omega$ Frequency of operation360 ops./hour360 ops./hourOperate/release time max. $20/20ms$ $20/20ms$ Bounce time max. $20ms$ $20ms$ Contacts ratingsTypeLoadCycles1 pole, AgCdO100x10³ ops.1 HP, 120VAC100x10³ ops.1 1/2HP, 240VAC100x10³ ops.30A, 240VAC100x10³ ops.30FLA, 96 LRA100x10³ ops.30A, 28 VDC50x10³ ops.10A, 480VAC6x10³ ops.1/2HP, 480VAC25x10³ ops.1/2HP, 600VAC25x10° ops.2 pole, AgCdO20A, 240VAC2 pole, AgCdO100x10° ops.2 pole, AgCdO50x10° ops.2 pole, AgCdO50x10° ops.2 pole, AgCdO50x10° ops.2 pole, AgCdO50x10° ops.2 pole, AgCdO100x10° ops.2 pole, AgCdO50x10° ops.2 pole, AgCdO25x10° ops.2 pole, AgSnOlnO20 A, 240 VAC				
Frequency of operation 360 ops./hour 360 ops./hour Operate/release time max. 20/20ms 20/20ms Bounce time max. 20ms 20ms Contacts ratings Type Load Cycles 1 pole, AgCdO 30A, 240VAC 100x10 ³ ops. 1HP, 120VAC 100x10 ³ ops. 11/2HP, 240VAC 306 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 30A, 28 VDC 50x10 ³ ops. 100x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 3/4HP, 120VAC 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 2/2HP, 600VAC 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 2 pole, AgCdO 20A, 28 VDC 50x10 ³ ops. 2/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. 1/2HP, 480VAC, 3 phase 6x10 ³ ops. <t< td=""><td></td><td></td><td>,</td><td>'</td></t<>			,	'
Operate/release time max. 20/20ms 20/20ms Bounce time max. 20ms 20ms Contacts ratings Type Load Cycles 1 pole, AgCdO 30A, 240VAC 100x10 ³ ops. 1 HP, 120VAC 100x10 ³ ops. 11/2HP, 240VAC 100x10 ³ ops. 30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 3/4HP, 120VAC 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 2/2 hP, 480VAC 50x10 ³ ops. 2 pole, AgCdO 50x10 ³ ops. 10/2HP, 480VAC 25x10 ³ ops. 2/2 hP, 480VAC 2 pole, AgCdO 20A, 28 VDC 50x10 ³ ops. 10/2HP, 480VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. <td></td> <td></td> <td></td> <td></td>				
Bounce time max. 20ms 20ms Contacts ratings Type Load Cycles 1 pole, AgCdO 30A, 240VAC 100x10³ ops. 1HP, 120VAC 100x10³ ops. 11/2HP, 240VAC 30FLA, 96 LRA 100x10³ ops. 30A, 28 VDC 50x10³ ops. 30A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10° ops. 1/2HP, 480VAC 25x10° ops. 1/2HP, 600VAC 25x10° ops. 2 pole, AgCdO 20A, 240VAC 100x10° ops. 3/4HP, 120VAC 2 pole, AgCdO 20A, 240VAC 100x10° ops. 3/4HP, 120VAC 2 pole, AgCdO 20A, 240VAC 100x10° ops. 3/4HP, 120VAC 2 pole, AgCdO 20A, 240VAC 100x10° ops. 2/2HP, 600VAC 2/2h10° ops. 2 pole, AgCdO 20A, 28 VDC 50x10° ops. 5/2h10° ops. 10/2HP, 480VAC 2/2h10° ops. 2 pole, AgCdO 20A, 28 VDC 50x10° ops. 5/2h10° ops. 1/2HP, 480VAC 2/2h10° ops. 2 pole AgSnOlnO 2/2D A, 240 VAC 2/2h10° ops. 2/2h10° ops. 2/2h10° ops.				
Contacts ratings Type Load Cycles 1 pole, AgCdO 30A, 240VAC 100x10³ ops. 1 HP, 120VAC 100x10³ ops. 11/2HP, 240VAC 30 FLA, 96 LRA 100x10³ ops. 30A, 28 VDC 50x10³ ops. 30A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10° ops. 1/2HP, 600VAC 25x10° ops. 2 pole, AgCdO 20A, 240VAC 100x10° ops. 3/4HP, 120VAC 20A, 240VAC 100x10° ops. 3/4HP, 120VAC 100x10° ops. 20A, 28 VDC 50x10° ops. 10/2HP, 480VAC 6x10° ops. 20A, 28 VDC 100x10° ops. 20A, 28 VDC 50x10° ops. 20 FLA, 83 LRA 100x10° ops. 20A, 480VAC 6x10° ops. 1/2HP, 480VAC, 3 phase 6x10° ops. 10/2HP, 480VAC 25x10° ops. 1/2HP, 600VAC 25x10° ops. 1/2HP, 600VAC 25x10° ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10° ops. 2 optic AgSnOlnO				
Type Load Cycles 1 pole, AgCdO 30A, 240VAC 100x10 ³ ops. 1HP, 120VAC 100x10 ³ ops. 1 1/2HP, 240VAC 100x10 ³ ops. 30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 30A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 20A, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20 A, 28 VDC 50x10 ³ ops. 20A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. 2 ol A, 240 VAC </td <td>Bounce time m</td> <td>ax.</td> <td>20ms</td> <td>20ms</td>	Bounce time m	ax.	20ms	20ms
Type Load Cycles 1 pole, AgCdO 30A, 240VAC 100x10 ³ ops. 1HP, 120VAC 100x10 ³ ops. 1 1/2HP, 240VAC 100x10 ³ ops. 30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 30A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 20A, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20 A, 28 VDC 50x10 ³ ops. 20A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. 2 ol A, 240 VAC </td <td></td> <td></td> <td></td> <td></td>				
1 pole, AgCdO 30A, 240VAC 100x10 ³ ops. 1 HP, 120VAC 100x10 ³ ops. 1 1/2HP, 240VAC 100x10 ³ ops. 30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 20A, 28 VDC 50x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20 A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. <td></td> <td>-</td> <td></td> <td></td>		-		
30A, 240VAC 100x10 ³ ops. 1HP, 120VAC 100x10 ³ ops. 1/2HP, 240VAC 100x10 ³ ops. 30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 480VAC 100x10 ³ ops. 1/2HP, 480VAC 100x10 ³ ops. 1/2HP, 480VAC 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10 ³ ops.		Load		Cycles
1HP, 120VAC 100x10³ ops. 1 1/2HP, 240VAC 100x10³ ops. 30 FLA, 96 LRA 100x10³ ops. 30A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10³ ops. 2 pole, AgCdO 20A, 240VAC 20 A, 240VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20 A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 10A, 480VAC 25x10³ ops. 10A, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 2 op A, 240 VAC 25x10³ ops. 2 op A, 240 VAC 25x10³ ops. 2 op A, 240 VAC 25x10³ ops. 2 op A, 240 VAC 25x10³ o	i pole, Agodo	201 2401/00		100v103 000
1 1/2HP, 240VAC 100x10³ ops. 30 FLA, 96 LRA 100x10³ ops. 30A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10³ ops. 2 pole, AgSnOlnO 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 2 pole AgSnOlnO 20 A, 240 VAC 2 pole AgSnOlnO 20 A, 240 VAC 2 pole AgSnOlnO 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil voltage range <t< td=""><td></td><td></td><td></td><td></td></t<>				
30 FLA, 96 LRA 100x10 ³ ops. 30A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10 ³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10 ³ ops. 2 pole, AgSNOlnO 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 2 op A, 240 VAC 25x10 ³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data 6 to 110VDC 6 to 277VAC 6 to 277VAC				
30A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 3/4HP, 240VAC 100x10³ ops. 2 0 FLA, 83 LRA 100x10³ ops. 20A, 28 VDC 50x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. 2 ops. 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. 50x10 ³ ops. Coil voltage range 6 to 110VDC 6 to 277VAC		,		
10Å, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC, 3 phase 6x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 2 pole, AgCdO 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 10A, 480VAC 6x10³ ops. 10A, 480VAC 6x10³ ops. 10A, 480VAC 25x10³ ops. 10A, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC				
1/2HP, 480VAC 25x10³ ops. 1HP, 480VAC, 3 phase 6x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20 A, 28 VDC 50x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC		· · · · · · · · · · · · · · · · · · ·		
1HP, 480VAC, 3 phase 6x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 1 1/2HP, 240VAC 100x10³ ops. 20 A, 28 VDC 50x10³ ops. 20A, 28 VDC 50x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC		- ,		
1/2HP, 600VAC 25x10³ ops. 2 pole, AgCdO 20A, 240VAC 100x10³ ops. 3/4HP, 120VAC 100x10³ ops. 3/4HP, 120VAC 1 1/2HP, 240VAC 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC 100x10°			2000	
2 pole, AgCdO 20A, 240VAC 100x10 ³ ops. 3/4HP, 120VAC 100x10 ³ ops. 1 1/2HP, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10 ³ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC			IdSE	
20A, 240VAC 100x10 ³ ops. 3/4HP, 120VAC 100x10 ³ ops. 1 1/2HP, 240VAC 100x10 ³ ops. 20 FLA, 83 LRA 100x10 ³ ops. 20A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10 ³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC		1/2111,000VAO		20/10/00/3.
3/4HP, 120VAC 100x10³ ops. 1 1/2HP, 240VAC 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 20 A, 240 VAC 25x10³ ops. 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC	2 poie, Agouo	204 2401/40		$100 \times 10^3 \text{ one}$
1 1/2HP, 240VAC 100x10³ ops. 20 FLA, 83 LRA 100x10³ ops. 20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC				
20 FLA, 83 LRA 100x10 ³ ops. 20A, 28 VDC 50x10 ³ ops. 10A, 480VAC 6x10 ³ ops. 1/2HP, 480VAC 25x10 ³ ops. 1/2HP, 480VAC, 3 phase 6x10 ³ ops. 1/2HP, 600VAC 25x10 ³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10 ³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC		,		
20A, 28 VDC 50x10³ ops. 10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC, 3 phase 6x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC				
10A, 480VAC 6x10³ ops. 1/2HP, 480VAC 25x10³ ops. 1/2HP, 480VAC, 3 phase 6x10³ ops. 1HP, 480VAC 25x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC				
1/2HP, 480VAC 25x10³ ops. 1HP, 480VAC, 3 phase 6x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. 25x10³ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC 6 to 277VAC				
1HP, 480VAC, 3 phase 6x10³ ops. 1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. 20x10 ³ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC				
1/2HP, 600VAC 25x10³ ops. 2 pole AgSnOlnO 20 A, 240 VAC 25x10³ ops. Mechanical endurance 10x10 ⁶ ops. 25x10³ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC			220	
2 pole AgSnOlnO 20 A, 240 VAC 25x10 ³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC			030	$25 \times 10^3 \text{ ops.}$
20 A, 240 VAC 25x10 ³ ops. Mechanical endurance 10x10 ⁶ ops. Coil Data 6 to 110VDC Coil voltage range 6 to 277VAC	2 nole AgSnOlr			20/10 003.
Mechanical endurance 10x10 ⁶ ops. Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC	2 2010 / 90/10/1			25x10 ³ ops.
Coil Data Coil voltage range 6 to 110VDC 6 to 277VAC	Mechanical end	,	10x	
Coil voltage range 6 to 110VDC 6 to 277VAC				1
6 to 277VAC	Coil Data			
	Coil voltage ran	ge		
Coil insulation system according UL Class B				
	Coil insulation s	system according UL	C	lass B

Coil vers	sions, DC coil			
Coil	Rated	Operate	ReleaseCoil	Rated coil
code	voltage	voltagevoltage	resistance	power
	VDC	VDC	Ω±10%	W
006	6	4.5	32.1	1.13
012	12	9.0	120	1.20
024	24	18.0	472	1.23
048	48	36.0	1800	1.30

110 110 82.5 10000 1.22 All figures are given for coil without preenergization, at ambient temperature +23°C

Coil versions, AC coil

Coil	Rated	Operate	Coil	Rated coil
code	voltage	voltage	resistance	power
	VAC	VAC	Ω±15%	VA
006	6	5.1	4.2	2.8
012	12	10.2	18	2.8
024	24	20.4	72	2.8
120	120	102.0	1700	2.9
240	240	204.0	7200	2.9
277	277	235.5	10250	2.5
A 11 C				0000 0011

All figures are given for coil without preenergization, at ambient temperature +23°C, 60 Hz.

Insulation Data Initial dielectric strength 1200V_{rms} 3750V_{rms} between open contacts between contact and coil 3750V_{rms} between adjacent contacts between coil and frame 2000V Initial insulation resistance 100MΩ at 500VDC between insulated elements **Other Data** Ambient temperature -45°C to 45°C DC coil AC coil -45°C to 70°C Category of environmental protection IEC 61810 RTI - dust protected and RT0 - open style QC.250, PCB .047 Terminal type Terminal retention, push force QC .205 17lbs for 3s QC .110, QC .187, QC .250, all PCB 25lbs for 3s 9<u>2g</u> Weight

Packaging/unit Accessories

NOTE: no sockets are available for this relay

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Catalog product data, 'Definitions' section. application notes and all specifications are subject to change.

1

tray/25 pcs., box/150pcs

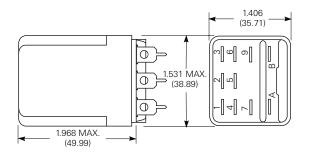


General Purpose Panel/Plug-in Relays

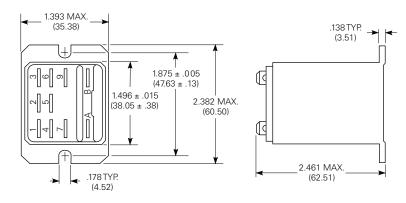
KUHP Series Panel Relay (Continued)

Dimensions

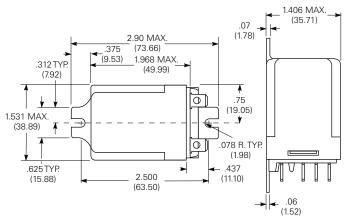
Plain case



Top flange enclosure



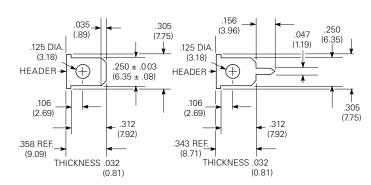
Bracket mount case



Terminal dimensions

6.35mm (.250") Quick Connect/Solder

Printed circiot

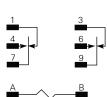


Terminal assignment

1 form C

- 1 form A (delete 2)
- 1 form B (delete 5)





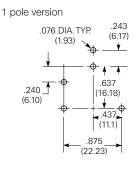
2 form A (delete 1 and 3)

2 form B (delete 4 and 6)

2 form C

PCB layout

Bottom view on solder pins

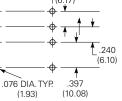


2 pole version

¢

Φ





04-2013, Rev. 1013 <u>www.te.com</u> © 2013 Tyco Electronics Corporation, a TE Connectivity Ltd. company.

2

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section. Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.



General Purpose Panel/Plug-in Relays

KUHP Series Panel Relay (Continued)

Product code structure	Typical product code	11	A 5	1
уре				
KUHP Enclosed Panel Plug-in Relay, 20/30A KUH Open Panel Plug-in Relay 20/30A				
Contact arrangement and rating				
1 1 form A (NO); 30A	7 2 formA (NO); 20A			
2 1 form B (NC); 30A	8 2 form B (NC); 20A			
5 1 form C (CO); 30A	11 2 form C (CO); 20A			
Coil Input				
A AC, 50/60Hz	D DC			
Nountings				
KUHP options	KUH options			
1 Plain case	1 #6-32 stud, 0.218" locating tab			
5 Bracket mount case	4 #6-32 tapped core, 0.218" locating tab			
T Top flange mount case				
Ferminals and contact materials				_
1 .250" (6.35mm) guick connect/solder; silv	r-cadmium oxide 7 .047" (1.19mm) printed circu	uit; silver-ca	admium oxide	
	indium oxide S .047" printed circuit; silver ti			

Product Code	Arrangement	Mounting	Coil	Terminals	Part Number
KUHP-5DT1-12	1 form C, 1 CO	top flange	12VDC	.250" quick connect	8-1393114-7
KUHP-5DT1-24			24VDC		8-1393114-8
KUHP-5D51-24		bracket			9-1393114-1
KUHP-5D51-12			12VDC		9-1393114-0
KUHP-5A51-24			24VAC		8-1393114-5
KUHP-5A51-120			120VAC		8-1393114-4
KUHP-5AT1-120		top flange			8-1393114-1
KUHP-11A51-24		bracket	24VAC		7-1393114-0
KUHP-11A51-240	2 form C, 2 CO		240VAC		7-1393114-1
KUHP-11AT1-120		top flange	120VAC		6-1393114-5
KUHP-11DT1-24			24VDC		7-1393114-3
KUHP-11D51-12		bracket	12VDC		7-1393114-7
KUHP-11D51-24			24VDC		7-1393114-8
KUHP-11DT1-12		top flange	12VDC		7-1393114-2

3