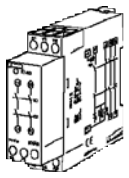
KNA Safety Relays

► Emergency Stop and Monitoring Functions
► Self-Checking Redundancy Concepts
► Return Loop Connection of External Contactors

KNA series safety relays interface between emergency pushbuttons, limit switches, pressure mats, sensors, and contactors. Redundancy and self-checking make KNA-RS series achieve Level 4 safety in accordance with EC European Standard EN 954-1 and the European Machinery Directive 89/392/EC. Safety relay with timed contacts provided by 85100736. UL and CUL listed and CE compliant.

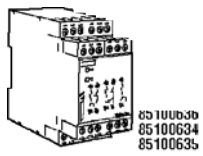
Stock No.	Mfr.'s Type	Safety Level	No of Safety/ Aux. Controls	Width	Operating Voltage	Input Circuits	EACH
793-4300	85100036	3	3 (NO)/1 (NC)	0.90"	24 VAC/VDC	1	**127.38**
793-4302	85100037	3	3 (NO)/1 (NC)	0.90"	80-260 VAC	1	**127.38**
793-4304	85100434	4	3 (NO)/1 (NC)	1.75"	115 VAC	2	**206.25**
793-4306	85100435	4	3 (NO)/1 (NC)	1.75"	230 VAC	2	**206.25**
793-4308	85100436	4	3 (NO)/1 (NC)	1.75"	24 VAC/VDC	2	**206.25**
793-4310	85100536	4	3 (NO)/1 (NC)	1.75"	24 VAC/VDC	4	**273.48**
793-4312	85100736	3	1/1/2 Timed	1.75"	24 VAC/VDC	2	**272.85**



KZE3-XS Extension Module

Provides additional safety output contacts for the units above.

793-4314	85100936	Same as primary	3 (NO)/1 (NC)	0.90"	24 VAC/VDC	Output Only	**110.00**
793-4316	85100937	Same as primary	3 (NO)/1 (NC)	0.90"	80-260 VAC	Output Only	**114.58**

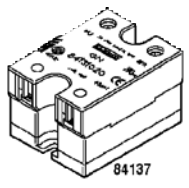


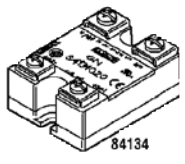
KZH Series 2-Hand Control Safety Relays

KZH series safety relays achieve up to Level 4 safety in accordance with EC European. Standard EN 574 (required for 2-hand logic blocks). UL and CUL recognized. CE compliant.

Stock No.	Mfr.'s Type	Safety Level	No. of Safety/ Aux. Controls	Width	Operating Voltage	EACH
793-4340	85100636	4	3/1	1.75"	24 VAC/VDC	**265.83**
793-4342	85100634	4	3/1	1.75"	115 VAC	**265.83**
793-4344	85100635	4	3/1	1.75"	230 VAC	**265.83**
793-4346	85100626	4	2/0	0.90"	24 VAC/VDC	**205.94**

GN Series Relays





► SMT Technology, Direct Bond Copper Substrate, LED Status Indicator

The GN series offers a built in IP20 "Touch Safe" cover and the traditional style case and offers current ranges from 10 A to 125 A. It is UL and cUL recognized, TÜV approved and CE compliant per LVD 73/23/EEC. EMC compatibility to EN 50082-2 (Immunity), EN50081-2 (Emissions), C.I.S.P.R.22 (Radiated) Class B, (Conducted) Class A, EN60950 and IEC 947-4-2.

84137 (IP20 — Touch Safe)

Zero Voltage Turn-On

Stock No.	Mfr.'s Type	Control Voltage	Output Current	Max. Output	EACH
793-2200	84137001	90-280 VAC	10 A	24-280 VAC	**20.99**
793-2202	84137011	90-280 VAC	25 A	24-280 VAC	**23.10**
793-2204	84137021	90-280 VAC	50 A	24-280 VAC	**29.17**
793-2206	84137031	90-280 VAC	75 A	24-280 VAC	**42.52**
793-2208	84137041	90-280 VAC	100 A	24-280 VAC	**48.77**
793-2210	84137081	90-280 VAC	125 A	24-280 VAC	**52.50**
793-2212	84137000	4-32 VDC	10 A	24-280 VAC	**18.67**
793-2214	84137010	4-32 VDC	25 A	24-280 VAC	**20.77**
793-2216	84137020	4-32 VDC	50 A	24-280 VAC	**26.83**
793-2218	84137030	4-32 VDC	75 A	24-280 VAC	**41.06**
793-2220	84137040	4-32 VDC	100 A	24-280 VAC	**46.43**
793-2222	84137080	4-32 VDC	125 A	24-280 VAC	**50.17**
793-2224	84137101	90-280 VAC	10 A	48-660 VAC	**28.47**
793-2226	84137111	90-280 VAC	25 A	48-660 VAC	**31.27**
793-2228	84137121	90-280 VAC	50 A	48-660 VAC	**35.23**
793-2232	84137131	90-280 VAC	75 A	48-660 VAC	**47.37**
793-2234	84137141	90-280 VAC	100 A	48-660 VAC	**52.97**
793-2236	84137181	90-280 VAC	125 A	48-660 VAC	**56.47**
793-2238	84137100	4-32 VDC	10 A	48-660 VAC	**26.12**
793-2246	84137110	4-32 VDC	25 A	48-660 VAC	**28.94**
793-2240	84137120	4-32 VDC	50 A	48-660 VAC	**32.89**

84137 (IP20 — Touch Safe) (continued)

Zero Voltage Turn-On (continued)

Stock No.	Mfr.'s Type	Control Voltage	Output Current	Max. Output	EACH
793-2242	84137130	4-32 VDC	75 A	48-660 VAC	**45.03**
793-2244	84137140	4-32 VDC	100 A	48-660 VAC	**50.63**
793-2248	84137180	4-32 VDC	125 A	48-660 VAC	**54.13**

Random Turn-On Version (continued)

793-2250	84137200	4-32 VDC	10 A	24-280 VAC	**21.47**
793-2252	84137210	4-32 VDC	25 A	24-280 VAC	**23.56**
793-2254	84137220	4-32 VDC	50 A	24-280 VAC	**29.63**
793-2256	84137230	4-32 VDC	75 A	24-280 VAC	**43.87**
793-2258	84137240	4-32 VDC	100 A	24-280 VAC	**49.23**
793-2260	84137280	4-32 VDC	125 A	24-280 VAC	**52.96**
793-2262	84137300	4-32 VDC	10 A	48-660 VAC	**28.94**
793-2264	84137310	4-32 VDC	25 A	48-660 VAC	**31.73**
793-2266	84137320	4-32 VDC	50 A	48-660 VAC	**35.70**
793-2268	84137330	4-32 VDC	75 A	48-660 VAC	**47.83**
793-2270	84137340	4-32 VDC	100 A	48-660 VAC	**53.43**
793-2272	84137380	4-32 VDC	125 A	48-660 VAC	**56.93**

84134 (IP00— Standard)

Zero Voltage Turn-On

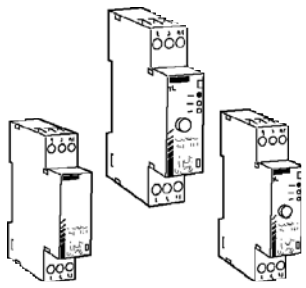
793-6400	84134001	90-280 VAC	10 A	24-280 VAC	**19.13**
793-6402	84134011	90-280 VAC	25 A	24-280 VAC	**21.23**
793-6404	84134021	90-280 VAC	50 A	24-280 VAC	**27.30**
793-6406	84134031	90-280 VAC	75 A	24-280 VAC	**41.53**
793-6408	84134041	90-280 VAC	100 A	24-280 VAC	**46.90**
793-6410	84134081	90-280 VAC	125 A	24-280 VAC	**51.06**
793-6412	84134000	4-32 VDC	10 A	24-280 VAC	**17.75**
793-6414	84134010	4-32 VDC	25 A	24-280 VAC	**18.90**
793-6416	84134020	4-32 VDC	50 A	24-280 VAC	**24.96**
793-6418	84134030	4-32 VDC	75 A	24-280 VAC	**39.21**
793-6420	84134040	4-32 VDC	100 A	24-280 VAC	**44.57**
793-6422	84134080	4-32 VDC	125 A	24-280 VAC	**48.30**
793-6424	84134101	90-280 VAC	10 A	48-660 VAC	**26.60**
793-6426	84134111	90-280 VAC	25 A	48-660 VAC	**29.40**
793-6428	84134121	90-280 VAC	50 A	48-660 VAC	**33.36**
793-6430	84134131	90-280 VAC	75 A	48-660 VAC	**45.49**
793-6432	84134141	90-280 VAC	100 A	48-660 VAC	**51.10**
793-6434	84134181	90-280 VAC	125 A	48-660 VAC	**54.57**
793-6436	84134100	4-32 VDC	10 A	48-660 VAC	**24.27**
793-6438	84134110	4-32 VDC	25 A	48-660 VAC	**27.07**
793-6440	84134120	4-32 VDC	50 A	48-660 VAC	**31.03**
793-6442	84134130	4-32 VDC	75 A	48-660 VAC	**43.17**
793-6444	84134140	4-32 VDC	100 A	48-660 VAC	**48.76**
793-6446	84134180	4-32 VDC	125 A	48-660 VAC	**52.27**

Random Turn-On Version

793-6460	84134200	4-32 VDC	10 A	24-280 VAC	**19.60**
793-6462	84134210	4-32 VDC	25 A	24-280 VAC	**21.69**
793-6464	84134220	4-32 VDC	50 A	24-280 VAC	**27.77**
793-6466	84134230	4-32 VDC	75 A	24-280 VAC	**47.37**
793-6468	84134240	4-32 VDC	100 A	24-280 VAC	**47.36**
793-6470	84134280	4-32 VDC	125 A	24-280 VAC	**51.11**
793-6472	84134300	4-32 VDC	10 A	48-660 VAC	**27.07**
793-6474	84134310	4-32 VDC	25 A	48-660 VAC	**29.86**
793-6476	84134320	4-32 VDC	50 A	48-660 VAC	**33.83**
793-6478	84134330	4-32 VDC	75 A	48-660 VAC	**45.97**
793-6480	84134340	4-32 VDC	100 A	48-660 VAC	**51.57**
793-6482	84134380	4-32 VDC	125 A	48-660 VAC	**55.06**

RHP Series Hybrid Power Relay

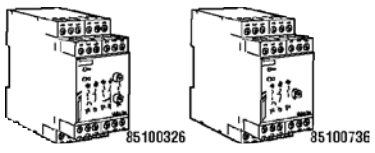
— NEW —



The RHP Series has been tagged a "hybrid" relay because it is one part solid state, one part electro-mechanical and one part microprocessor. When the input voltage is applied, an internal solid state component (triac) switches on. Once the load is turned on, an electro-mechanical relay short-circuits the triac and maintains the hybrid relay in the closed position. When the input voltage is removed, the hybrid opens following the reverse cycle. The "switching" functions between the triac and the relay are performed by the microprocessor. Since there is no power (heat) to dissipate, there is no need for an external heatsink. The life of the relay is greatly increased because the causes of wear (arcing) are now eliminated by the parallel triac. Acoustic noise is minimal (35 dB)...no more clicking/buzzing noise from contactors. This new technology allows switching of 20 amps in a DIN-rail enclosure only 17.5 mm wide. A life expectancy of 5 million operations at full load. The RHP will fit all applications with a resistive load up to 20 A and on/off cycles of a 6 per minute max. UL and cUL Listed and CE compliant.

Stock No.	Mfr.'s Type	Description	EACH
793-0010	84138001	AC input contactor	**47.50**
793-0011	84138000	DC input contactor	**47.50**
793-0012	84138101	AC bi-stable relay	**44.50**

KSW Series Zero Speed and KZR Series with Delayed Contacts Safety Relays



KSW and KSR series safety relays are used for safety gate interlocking to prevent access to hazardous areas. KSW series measures remnant voltages at motor windings for AC and DC motors (1-3 phase, up to 600 VAC) during rundown. No additional sensors are required. Used to obtain safety Level 4 according to NF. EN 954-1. KSR series allows delayed access to machinery by the means of timed contacts to achieve Category 3 according to EN 954. **Method:** 85100326 — Measurement of remnant voltage; 85100736 — Timed contact.

Stock No.	Mfr.'s Type	Operating Voltage	EACH
793-4352	85100326	24 VAC/VDC	**300.37**
793-4312	85100736	24 VAC/VDC	**272.85**

Printed Circuit Board Mountable AC Output Solid State Relays

GA1, GA8 Series SSR

► Industry Standard Packaging, SIP or Flat Pack
► 4 KV Optical Isolation
► 100 A Surge Capability
► UL Recognized, VDE Approval on Some Models
► 280 VAC Max. Output Voltage Rating
► 3-24 VDC Control Voltage

Stock No.	Mfr.'s Type	Output Current Rating @ 25°C TA	EACH
793-7143	GA1-6B02	4 A	**10.58**
793-7144	GA8-6B02	4 A	**9.27**
793-7145	GA8-6D05	5 A	**10.30**
793-7146	GA8-6D05R	5 A	**10.10**