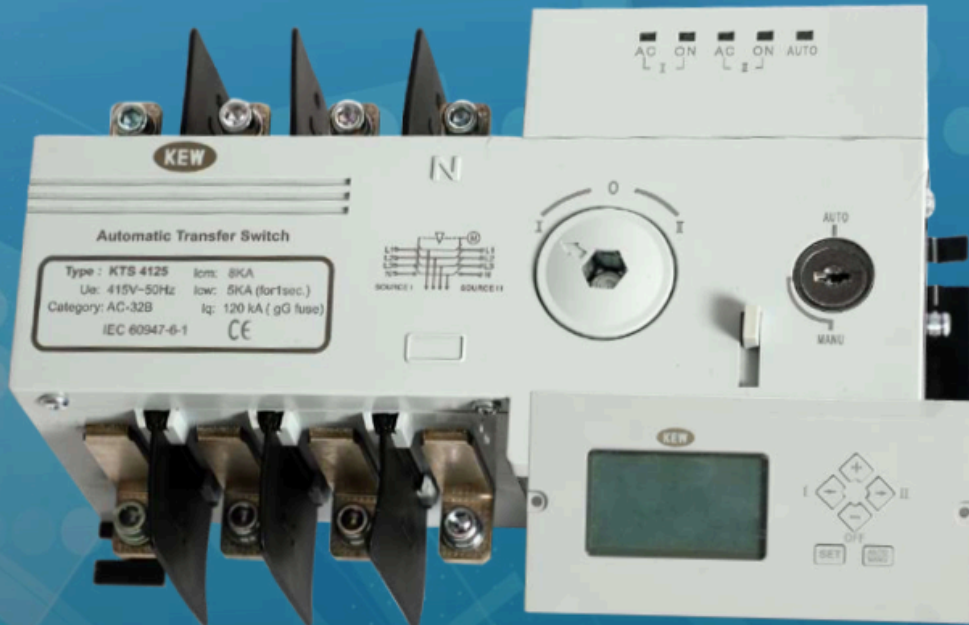


# KEW

## Automatic Transfer Switch (KTS) Smarter Switching Solutions

[www.kwelectricals.com](http://www.kwelectricals.com)



- Range: 63A - 3200A
- Ref Std.: IS/IEC60947 - 1&3
- No. of Frames: 4
- Four pole execution
- Built-in Controller
- Generator Control
- Split LCD Display
- Fire Linkage Control
- Available in open and sheet steel execution

Auto Transfer Switch is a perfect dual power transfer switch ranging from 63-630A systematised with time delays to prolong the stability of power source while providing smooth and high-speed changeover of sources in the event of power outage or disturbances in the power supply.

They are capable of making , carrying and breaking current under normal circuit conditions which may include operating overload conditions and also carrying current under specified abnormal circuit conditions such as those of short circuit for a specified time.

#### Range:

- Presently available in 415V AC
- 63A - 630A
- 3 Frame sizes

#### Conformity:

- IEC 60947-6-1
- AC 33B Utilisation category

#### General Characteristics:

The ideal conception in KTS changeover switch incorporate 3 stable positions (I-O-II) changeover from one to the other while functioning.

##### ⇒ Positions:

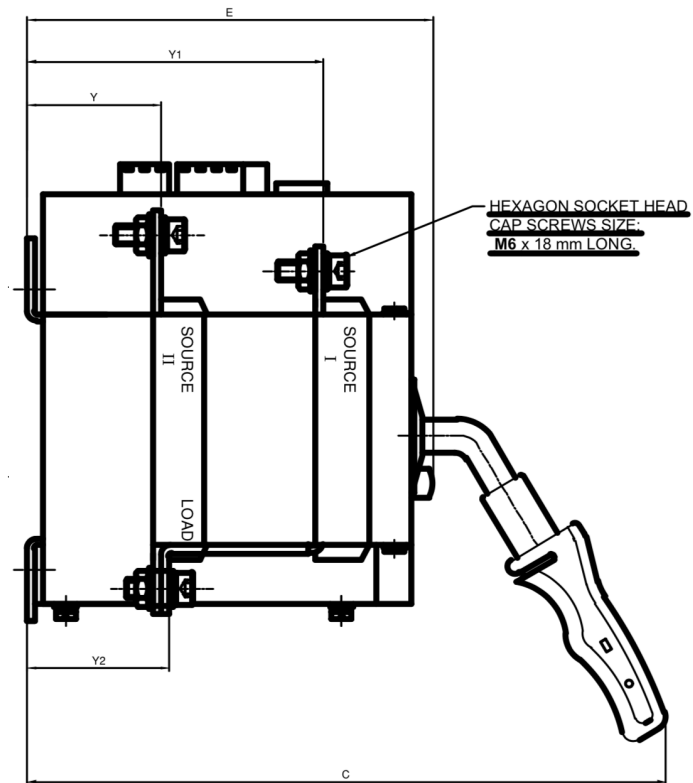
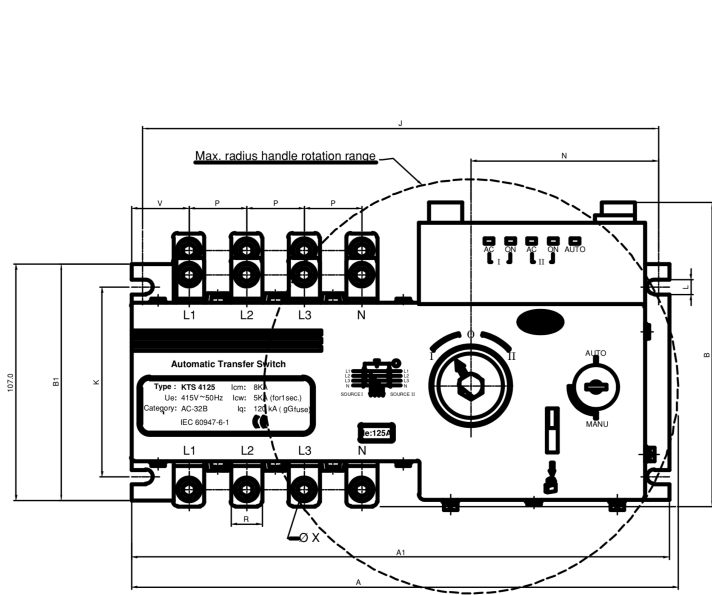
- O – Circuit I and II open (Neutral position )
- I – Circuit I close and circuit II open (Transformer supply "ON" and generator supply "OFF" )
- II – Circuit I open and Circuit II close (generator supply "ON" and transformer supply "OFF")
- All positions are interlocked

##### ⇒ Switch Mechanism:

- It consists of double complex contact, horizontal pulling mechanism , micro-motor energy pre storage and micro-computer control technology leading to Zero Arc .
- High thermal and dynamic strength to withstand rated fused short circuit current level 80KA rms.

#### Advantages:

- In-built protection against under voltage, over voltage, under frequency, over frequency and single phasing.
- Auto and manual mode of operation with in-built control switching mode selection.
- Real time monitoring of system voltage and frequency for electricity board and DG.
- Eliminates the need for external AMF controller due to the availability fo built-in microprocessor controller.
- Optional remote display for real time monitoring and controlling of both sources.
- Fire alarm / external fault trip feature is provided.



All Dimensions are in mm

Ampere Frame Rating (A)	Over all Dimensions						Switch Mounting Dimensions					Connection Terminals					
	A	A1	B	B1	C	E	J	K	L	N	P	R	V	Ø X	Y	Y1	Y2
125	330	235	135	115	165	125	228	85	6.5	83	30	11	21	6.5	41.5	91.5	66.5
160	374	301	175	140	200	150	285	102	7	94	36	20	31	8.5	55.5	125.5	92.5
250	436	373	200	178	250	198	344	108	6.5	99	50	24	37	11	72	157	116
630	502	433	265	260	295	244	416	180	9	101	65	40	47.5	12	83	193	140

PRODUCT CODE	KTS-4063	KTS-4100	KTS-4125	KTS-4160	KTS-4200	KTS-4250	KTS-4320	KTS-4400	KTS-4630
<b>SPECIFICATION</b> Characteristics according to IEC 60947-6-1									
Rated Operational Current Ie (A)	63	100	125	160	200	250	320	400	630
Rated Insulation Voltage Ui (Vac)	500	500	500	500	500	500	500	500	500
Dielectric Strength (Kvac) 50Hz 1 min.	5	5	5	5	5	5	5	5	5
Rated Impulse Withstand Voltage Uimp (kV)	8	8	8	8	8	8	12	12	12
Poles	4	4	4	4	4	4	4	4	4
Controller Type	Integrated Mounting / Split Mounting with LCD Display (optional)								
<b>OVERLOAD CAPACITY</b>									
Rated Short-Time Withstand Current Icw (kA, RMS) (0.1 & 1s)	9 & 5	9 & 5	12 & 25	12 & 25	12 & 25	12 & 25	40 & 20	40 & 20	50 & 25
Rated Short Circuit Making Capacity Icm (kA, PEAK)	8	8	8	17	17	17	26	26	26
Withstand & Close-On Rating Iq (kA) (with gG current limiting fuse links)	80	80	80	80	80	80	80	80	80
<b>MAKING &amp; BREAKING CHARACTERISTICS</b>									
Making Capacity	10*Ie								
Breaking Capacity	8*Ie								
<b>ENDURANCE</b>									
Mechanical Life (No. of Operations)	10000	10000	10000	8000	8000	8000	3000	3000	3000
Electrical Life (No. of Operations)	8000	8000	8000	6000	6000	6000	2000	2000	2000
Utilization Category	AC-32A	AC-32A	AC-32A	AC-33B	AC-33B	AC-33B	AC-33B	AC-33B	AC-33B
<b>TRANSFER TIME</b>									
I-II or II-I (s)	0.5	0.5	0.5	1	1.1	1.1	1.2	1.2	1.2
I-0 or II-0 (s)	0.3	0.3	0.3	0.6	0.7	0.7	0.8	0.8	0.8
<b>CONNECTION</b>									
Wiring Way	Front								
<b>(Details of copper Conductors and Busbar)</b>									
Cable Size (Sq mm)	10	25	25	50	70	95	120	185	500
Max. Bar width (mm)	12x5	12x6	19x5	19x6	25x6	25x6	32x10	38x10	38x12

PRODUCT CODE	KTS-4063	KTS-4100	KTS-4125	KTS-4160	KTS-4200	KTS-4250	KTS-4320	KTS-4400	KTS-4630
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<b>(Details of Aluminium Conductors and Busbar )</b>									
Cable Size (Sq mm)	16	25	35	70	95	120	240	300	800
Max. Bar width (mm)	12x6	19x6	19x10	19x10	25x10	25x10	32x10	38x12	38x16
CONTROLLER TYPE	Integrated Mounting / Split Mounting with LCD Display (optional)								
<b>ELECTROMAGNETIC COMPATIBILITY</b>									
EMC Class	Class B								
Radio Frequency Transmission Test	EN55011								
Radio Frequency Radiation Transmission Test	EN55012								
<b>MECHANICAL CHARACTERISTICS</b>									
Overall Dimensions (WxDxH) (mm)									
Weight (kg)	2.6	4.2	4.2	5.1	10	11	16	20.2	22

## Functions of ATS Controller

RATED VOLTAGE V(AC)	400 50/60 hz
VOLTAGE MEASURING RANGE V(AC)	40 to 300
<b>MODE OF TRANSFER</b>	
Automatic	Auto transfer & Auto recovery , Auto transfer & no auto recovery and power grid-generator
Manual	Manual main power , manual backup power and Manual off.
ISOLATION LOCK	OFF position has isolation function and can also be padlocked
<b>POWER SUPPLY MONITORING,PROTECTION &amp; CONTROL</b>	
Primary and Secondary Source	Under Voltage , Over Voltage, Frequency protection
Time Delay Adjustment	Transfer Delay (0 to 180 s) , Recovery Delay (0 to 180s) , Generator start & stop delay (0 to 180s)
Priority Selection	Primary / Secondary Source
<b>INDICATION AND CONTROL</b>	
Auxillary Power terminal V (DC)	24
Main Power On indication	Inbuilt contacts of 220v ac 5amp
Reserve Power On Indication	yes
Generator Control	Generator start and stop with help of 1NO & 1NC Dc 2A relay contact.
Fire Linkage Control	Can switch of the device with one set passive NO feedback contact.
COMMUNICATION	Ethernet gateway / RS 485 (Optional)

