KRC2 KSD (KUKA SERVO DRIVE)

The KSD is the drive unit for each one of the robot and where present external axes.
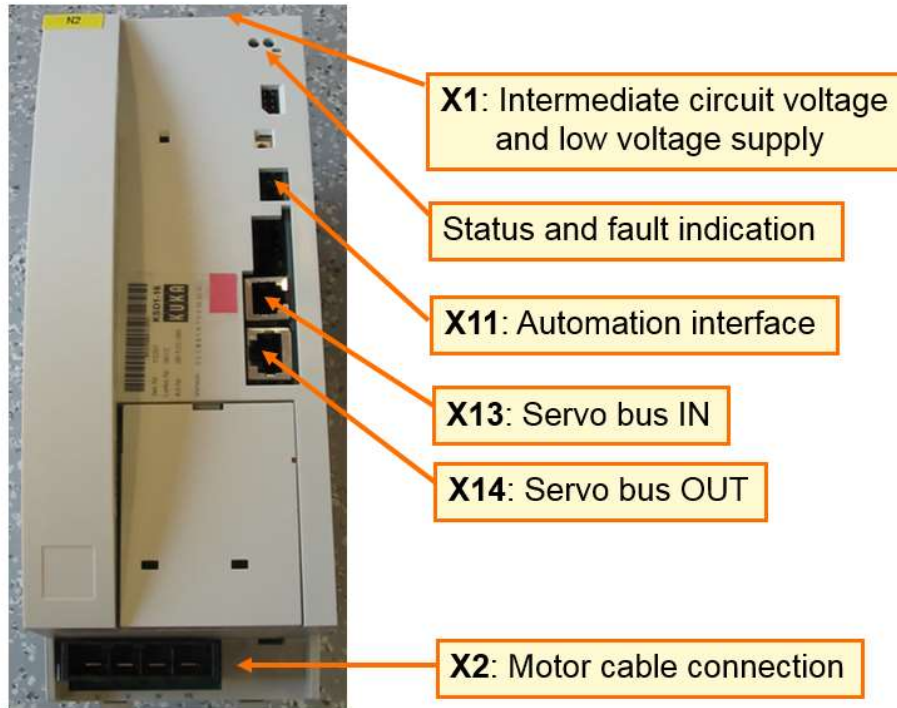
The KSDs are rated depending on their power output in Amps

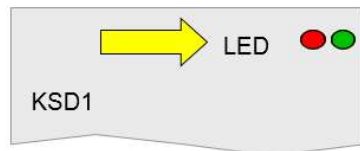See below for a table of the common drives and the robot types:

Robot type	Axis 1	Axis 2	Axis 3	Axis 4	Axis 5	Axis 6
KR6 / KR15 / KR15L6 / KR16	KSD1-16	KSD1-16	KSD1-08	KSD1-08	KSD1-08	KSD1-08
KR30	KSD1-32	KSD1-32	KSD1-16	KSD1-08	KSD1-08	KSD1-08
KR30L15	KSD1-48	KSD1-48	KSD1-32	KSD1-08	KSD1-08	KSD1-08
KR30K / KR45 / KR60 / KR60K / KR60L30K / KR60L45K	KSD1-32	KSD1-48	KSD1-16	KSD1-08	KSD1-08	KSD1-08
KR125 / KR150 / KR200	KSD1-32	KSD1-32	KSD1-32	KSD1-16	KSD1-16	KSD1-16
KR125W	KSD1-64	KSD1-64	KSD1-32	KSD1-16	KSD1-16	KSD1-16
KR60P / KR100P / KR350 / KR500	KSD1-64	KSD1-64	KSD1-64	KSD1-32	KSD1-32	KSD1-32
KR100PA / KR160PA	KSD1-64	KSD1-64	KSD1-64	-	KSD1-32	KSD1-32
KR150 / KR180 / KR150W / KR180W / KR150K / KR180K / KR210	KSD1-48	KSD1-48	KSD1-48	KSD1-16	KSD1-16	KSD1-16
KR180PA	KSD1-48	KSD1-48	KSD1-48	-	-	KSD1-16

Drive servo	KSD1-08	KSD1-16	KSD1-32	KSD1-48	KSD1-64
Intermediate circuit voltage	0 - 770 V				
Rated current	4 A	8 A	16 A	17 A	20 A
Max. output current	8 A	16 A	32 A	48 A	64 A
Shape/ Dimensions WxHxD	88 x 240 x 180 mm			132 x 240 x 180 mm	

Below is a diagram of the various connectors:

X1: Intermediate circuit voltage and low voltage supply

Status and fault indication

X11: Automation interface

X13: Servo bus IN

X14: Servo bus OUT

X2: Motor cable connection

For diagnostics the KSD has several LEDs, below is a diagram showing the location of the these diagnostic LEDs.

LED

KSD1

Red LED	Green LED	Meaning
Off	Flashes slowly	UIC<250V
Off	Flashes quickly	UIC>250V
Off	On	Servo enable UIC>250V
Off	Off	No 27V power supply
On	Off	Undefined drive servo state
Flashes quickly	Flashes slowely (UIC<250V)	Fault present
	Flashes quickly (UIC>250V)	
Flashes slowly	Flashes slowely (UIC<250V)	Alarm present
	Flashes quickly (UIC>250V)	

For removal of the KSD see the guide below:

Use screwdriver to lift
Top clip and free KSD,
Repeat for bottom Clip.

Note that there is no
addressing of the KSD
so identical KSDs can
be swapped to aid fault
finding

Please contact us for further information.