

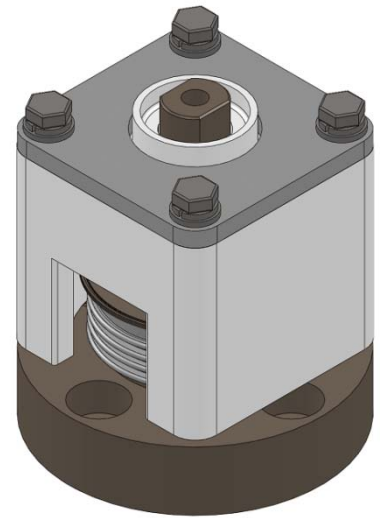
## Standard Rectifier Diode Assemblies

July 2013 – Issue 1

### *Introducing the new range of **easy mount** standard rectifier diode assemblies from IXYS UK*

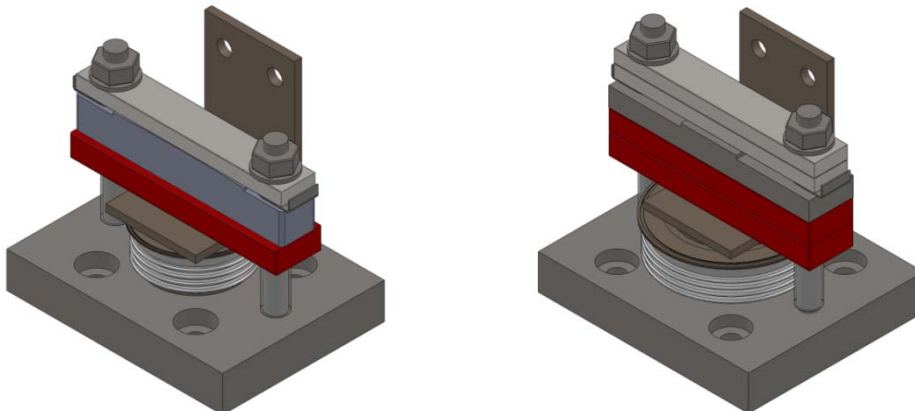
These new assemblies, which can be supplied either with the diodes ready mounted or as kits allow for easy mounting of rectifier diodes to cooling fins using four bolts.

The diodes are single side mounted directly to a copper base plate pre-drilled with the four bolt holes. Diodes can be either anode or cathode side down, with three versions available suitable for 34mm to 50mm electrode devices. An extensive range of 'standard' parts is available, see overleaf, with the mounting hole positions compatible with the now obsolete range of flat based rectifiers previously offered by a number of manufacturers.



#### Features and Benefits

- Design compatible with obsolete flat based rectifiers
- Utilises high reliability, hermetically sealed IXYS UK capsule diodes
- Voltage ratings up to 4.5kV
- Current ratings up to 2035A
- Direct single side mounting to cooling plates



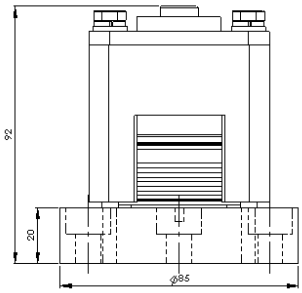
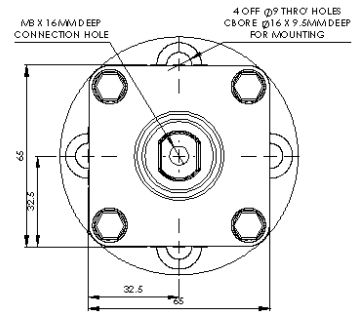
#### Applications

- Rail Applications
  - Traction Main Drives
  - DC Locomotives
  - Trackside Substations
- Front-end Rectification
- Power Conversion
- Marine and Off-Shore Applications
- Chemical Power Supplies



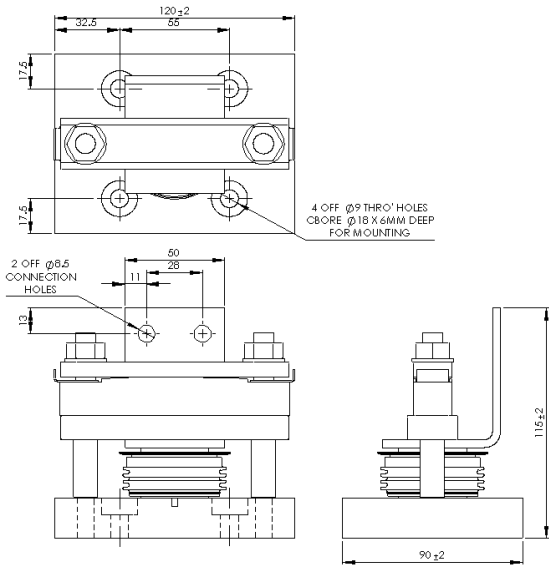
# New Product Brief – Standard Rectifier Diode Assemblies

Part No.	Old square base part no.	Base polarity	V <sub>RRM</sub> V	I <sub>DM</sub> A T <sub>c</sub> = 100°C	I <sub>TSM</sub> kA	I <sup>2</sup> t A <sup>2</sup> s	V <sub>0</sub> V	r <sub>T</sub> mΩ	R <sub>th</sub> K/W	Temp °C	Outline
W1185LC450KBR †	SW45KBR515	Anode	4500	435	10.2	520 x 10 <sup>3</sup>	1.000	0.575	0.085	160	WC64
W1185LC450KBN †	SW45KBN515	Cathode	4500	380	10.2	520 x 10 <sup>3</sup>	1.000	0.575	0.101	160	WC64
W1411LC360KBR †	SW36KBR595	Anode	3600	505	12.2	744 x 10 <sup>3</sup>	0.900	0.388	0.085	160	WC64
W1411LC360KBN †	SW36KBN595	Cathode	3600	445	12.2	744 x 10 <sup>3</sup>	0.900	0.388	0.101	160	WC64
W1524LC300KBR †	SW30KBR636	Anode	3000	540	13.4	898 x 10 <sup>3</sup>	0.870	0.323	0.085	160	WC64
W1524LC300KBN †	SW30KBN636	Cathode	3000	470	13.4	898 x 10 <sup>3</sup>	0.870	0.323	0.101	160	WC64
W1748LC220KBR †	SW22KBR805	Anode	2200	660	13.5	911 x 10 <sup>3</sup>	0.870	0.280	0.085	175	WC64
W1748LC220KBN †	SW22KBN805	Cathode	2200	582	13.5	911 x 10 <sup>3</sup>	0.870	0.280	0.101	175	WC64
W2058LC120KBR †	SW12KBR935	Anode	1200	760	16.1	1.30 x 10 <sup>6</sup>	0.790	0.192	0.085	175	WC64
W2058LC120KBN †	SW12KBN935	Cathode	1200	665	16.1	1.30 x 10 <sup>6</sup>	0.790	0.192	0.101	175	WC64
W1185LC450KCR	SW38KBR515	Anode	4500	455	10.2	520 x 10 <sup>3</sup>	1.000	0.575	0.080	160	WC65
W1185LC450KCN	SW45KBN515	Cathode	4500	395	10.2	520 x 10 <sup>3</sup>	1.000	0.575	0.097	160	WC65
W1411LC360KCR	SW36KBR595	Anode	3600	530	13.2	756 x 10 <sup>3</sup>	0.900	0.388	0.080	160	WC65
W1411LC360KCN	SW36KBN595	Cathode	3600	460	12.3	759 x 10 <sup>3</sup>	0.900	0.388	0.097	160	WC65
W1524LC300KCR	SW30KBR635	Anode	3000	565	13.4	898 x 10 <sup>3</sup>	0.870	0.323	0.080	160	WC65
W1524LC300KCN	SW30KBN636	Cathode	3000	490	13.4	898 x 10 <sup>3</sup>	0.870	0.323	0.097	160	WC65
W1748LC220KCR	SW22KBR805	Anode	2200	690	13.5	911 x 10 <sup>3</sup>	0.870	0.280	0.080	175	WC65
W1748LC220KCN	SW22KBN805	Cathode	2200	600	13.5	911 x 10 <sup>3</sup>	0.870	0.280	0.097	175	WC65
W2058LC120KCR	SW12KBR935	Anode	1200	800	16.1	1.30 x 10 <sup>6</sup>	0.790	0.192	0.080	175	WC65
W2058LC120KCN	SW12KBN935	Cathode	1200	690	16.1	1.30 x 10 <sup>6</sup>	0.790	0.192	0.097	175	WC65
W3082MC45KDR	SB45KDR680	Anode	4500	1115	26.6	3.54 x 10 <sup>6</sup>	0.923	0.192	0.037	160	WC66
W3082MC45KDN	SB45KDN680	Cathode	4500	1030	26.6	3.54 x 10 <sup>6</sup>	0.923	0.192	0.041	160	WC66
W3708MC35KDR	SB35KDR820	Anode	3500	1240	33.7	5.68 x 10 <sup>6</sup>	0.958	0.112	0.037	160	WC66
W3708MC35KDN	SB35KDN820	Cathode	3500	1145	33.7	5.68 x 10 <sup>6</sup>	0.958	0.112	0.041	160	WC66
W3842MC28KDR	SB25KDR950	Anode	2800	1325	33.5	5.61 x 10 <sup>6</sup>	0.831	0.118	0.037	160	WC66
W3842MC28KDN	SB25KDN950	Cathode	2800	1225	33.5	5.61 x 10 <sup>6</sup>	0.831	0.118	0.041	160	WC66
W5636MC15KDR	SB15KDR14C	Anode	1500	2035	43.9	9.64 x 10 <sup>6</sup>	0.698	0.059	0.037	175	WC66
W5636MC15KDN	SB15KDN14C	Cathode	1500	1875	43.9	9.64 x 10 <sup>6</sup>	0.698	0.059	0.041	175	WC66

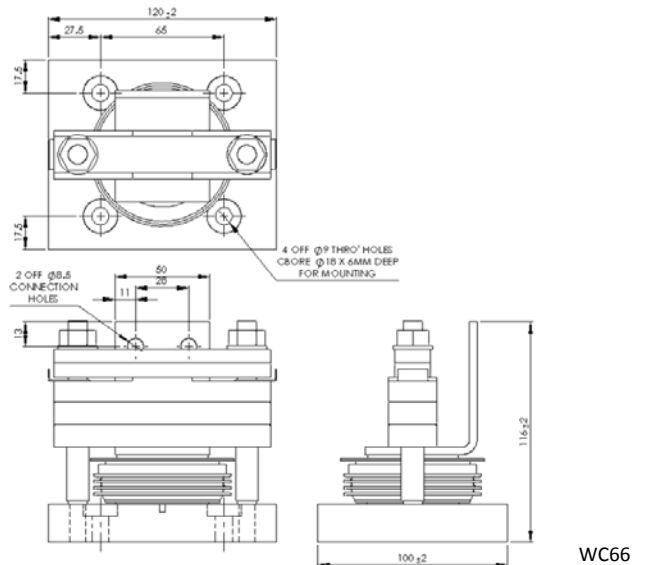


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† - Assembly supplied as kit of parts, all other designs available as either kit of parts or fully assembled



WC65



WC66



Certificate FM26085

IXYS UK Westcode Ltd's BS EN ISO9001 quality system is registered by BSI



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