

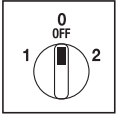

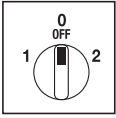
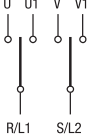
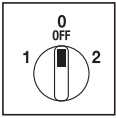
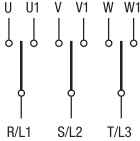
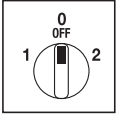
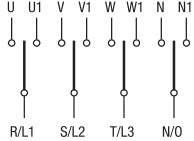
Standard solutions

In addition to solutions made to customer specifications, Bremas offers a complete range of standard products.


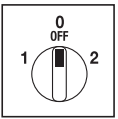
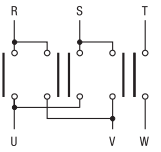
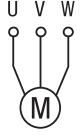
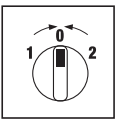
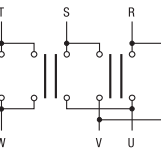

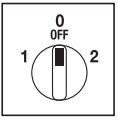
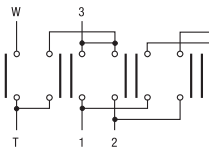
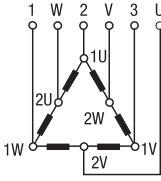
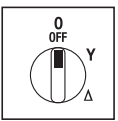
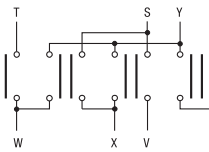
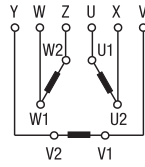
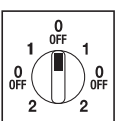
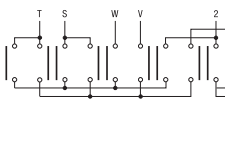
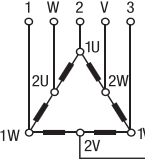
Standard products are designed and developed in line with the most common requirements from the market.




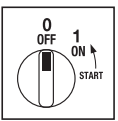
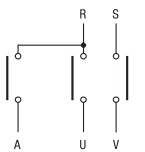
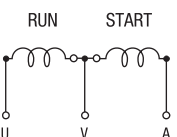
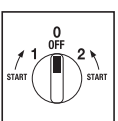
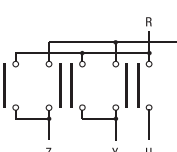
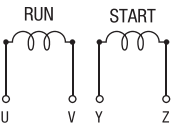
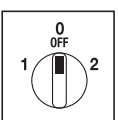
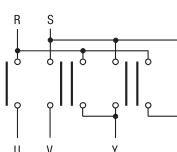
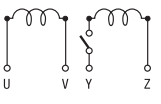
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plate	diagram	function	circuit diagram	contact/element description	element no.																																
	0001	ON-OFF switch 1 pole		<table border="1"> <tr> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td>CR</td> <td>CA</td> <td>60°</td> </tr> <tr> <td></td> <td>1</td> <td>X</td> <td></td> <td></td> <td>CA</td> <td>CQ</td> <td></td> </tr> <tr> <td>Contact</td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td></td> <td></td> </tr> <tr> <td>Element</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>Angle</td> <td></td> </tr> </table>		0				CR	CA	60°		1	X			CA	CQ		Contact		1	2	3	4			Element		1				Angle		1
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	0005	Change-over switch 1 pole		<table border="1"> <tr> <td></td> <td>2</td> <td></td> <td>×</td> <td></td> <td>CR</td> <td rowspan="3">60°</td> </tr> <tr> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td></td> <td>1</td> <td></td> <td>×</td> <td></td> <td>CQ</td> </tr> <tr> <td>Contact</td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td rowspan="2">Angle</td> </tr> <tr> <td>Element</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> </tr> </table>		2		×		CR	60°		0				CA		1		×		CQ	Contact		1	2	3	4	Angle	Element		1				1																																	
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	0007	Change-over switch 3 pole		<table border="1"> <tr> <td></td> <td>2</td> <td></td> <td>×</td> <td></td> <td>×</td> <td>×</td> <td>CR</td> <td rowspan="3">60°</td> </tr> <tr> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td></td> <td>1</td> <td></td> <td>×</td> <td></td> <td>×</td> <td>×</td> <td>CQ</td> </tr> <tr> <td>Contact</td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td rowspan="2">Angle</td> </tr> <tr> <td>Element</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td></td> </tr> </table>		2		×		×	×	CR	60°		0						CA		1		×		×	×	CQ	Contact		1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element		1				2				3				3											
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	0039	Change-over switch 4 pole		<table border="1"> <tr> <td></td> <td>2</td> <td></td> <td>×</td> <td></td> <td>×</td> <td>×</td> <td>×</td> <td>CR</td> <td rowspan="3">60°</td> </tr> <tr> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td></td> <td>1</td> <td></td> <td>×</td> <td></td> <td>×</td> <td>×</td> <td>×</td> <td>CQ</td> </tr> <tr> <td>Contact</td> <td></td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td rowspan="2">Angle</td> </tr> <tr> <td>Element</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td></td> </tr> </table>		2		×		×	×	×	CR	60°		0							CA		1		×		×	×	×	CQ	Contact		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Angle	Element		1				2				3				4				4
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Motor control switches 3 phase

plate	diagram	function	circuit diagram	contact/element description	 element no.																																																																										
	0008	Reversing switch 3 pole		<table border="1"> <tr><td>2</td><td></td><td>XX</td><td>XX</td><td></td><td>CR</td><td rowspan="3">60°</td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	2		XX	XX		CR	60°	0					CA	1					CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1	2	3												3																										
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	0036	Reversing switch 3 pole with spring return to "off"		<table border="1"> <tr><td>2</td><td></td><td>XX</td><td>XX</td><td></td><td>CR</td><td rowspan="3">45°</td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	2		XX	XX		CR	45°	0					CA	1					CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1	2	3												3																										
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Element	1	2	3																																																																												
	0009	Changing switch Dahlander pole		<table border="1"> <tr><td>2</td><td>X</td><td>XX</td><td>XX</td><td>XX</td><td>CR</td><td rowspan="3">60°</td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	2	X	XX	XX	XX	CR	60°	0					CA	1					CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Angle	Element	1	2	3	4																4																	
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	0010	STAR-DELTA Starter		<table border="1"> <tr><td>Δ</td><td>XX</td><td>XX</td><td>XX</td><td>XX</td><td>CR</td><td rowspan="3">60°</td></tr> <tr><td>Y</td><td></td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	Δ	XX	XX	XX	XX	CR	60°	Y					CA	0					CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Angle	Element	1	2	3	4																4																	
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	0011	Reversing switch Pole changing		<table border="1"> <tr><td>2</td><td>X</td><td>XX</td><td>XX</td><td>XX</td><td>CR</td><td rowspan="3">45°</td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>1</td><td></td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	2	X	XX	XX	XX	CR	45°	0					CA	1					CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Angle	Element	1	2	3	4	5	6																							6
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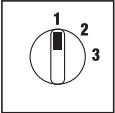
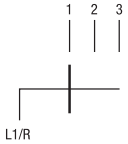
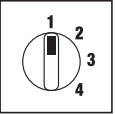
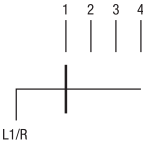
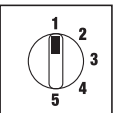
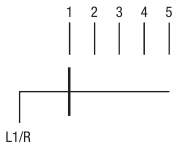
Motor control switches single phase

plate	diagram	function	circuit diagram	contact/element description	 element no.																																													
	0031	Switch single-phase motor + aux phase		<table border="1"> <tr><td>Avv</td><td>X</td><td>XX</td><td>XX</td><td>CR</td><td rowspan="3">45°</td></tr> <tr><td>1</td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>0</td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	Avv	X	XX	XX	CR	45°	1				CA	0				CQ	Contact	1	2	3	4	5	6	7	8	Angle	Element	1	2									2								
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Element	1	2																																																
	0032	Reversing Switch single-phase motor + aux phase		<table border="1"> <tr><td>Avv</td><td>X</td><td>XX</td><td>XX</td><td>CR</td><td rowspan="3">45°</td></tr> <tr><td>1</td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>0</td><td></td><td></td><td></td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	Avv	X	XX	XX	CR	45°	1				CA	0				CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1	2	3												3
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Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle																																					
Element	1	2	3																																															
	0034	Reversing Switch single-phase motor + centrif.		<table border="1"> <tr><td>2</td><td>XX</td><td>XX</td><td>XX</td><td>CR</td><td rowspan="3">45°</td></tr> <tr><td>0</td><td></td><td></td><td></td><td>CA</td></tr> <tr><td>1</td><td>XX</td><td>XX</td><td>XX</td><td>CQ</td></tr> <tr><td>Contact</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>Angle</td></tr> <tr><td>Element</td><td>1</td><td>2</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	2	XX	XX	XX	CR	45°	0				CA	1	XX	XX	XX	CQ	Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1	2	3												3
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Voltmeter & Ammeter switches																																																																																																						
plate	diagram	function	circuit diagram	contact/element description		element no.																																																																																																
	0016	Voltmeter switch 3 concatenated voltages		<table border="1"> <tr> <td>L3-L1</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> <td rowspan="3">45°</td> </tr> <tr> <td>L2-L3</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td>L1-L2</td> <td>X</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>CQ</td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td colspan="2">1</td> <td colspan="2">2</td> <td colspan="4"></td> <td></td> </tr> </table>	L3-L1	X	X					CR	45°	L2-L3			X	X			CA	L1-L2	X				X		CQ	0									Contact	1	2	3	4	5	6	7	8	Angle	Element	1		2								2																																										
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Element	1		2																																																																																																			
	0018	Voltmeter switch 3 concatenated voltages and 3 phase voltages		<table border="1"> <tr> <td>L3-N</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> <td rowspan="3">45°</td> </tr> <tr> <td>L2-N</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td>L1-N</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td>CQ</td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L1-L2</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>L2-L3</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L3-L1</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td colspan="2">1</td> <td colspan="2">2</td> <td colspan="3">3</td> <td colspan="5"></td> <td></td> </tr> </table>	L3-N	X							CR	45°	L2-N			X					CA	L1-N					X	X		CQ	0										L1-L2					X	X				L2-L3			X	X						L3-L1		X					X			Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1		2		3										3
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Element	1		2		3																																																																																																	
	0022	Ammeter switch 1 pole 3 current transformers		<table border="1"> <tr> <td>3</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> <td rowspan="3">90°</td> </tr> <tr> <td>2</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>0</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td colspan="2">1</td> <td colspan="2">2</td> <td colspan="3">3</td> <td colspan="5"></td> <td></td> </tr> </table>	3	X	X	X	X					CR	90°	2	X	X	X	X					CA	1			X	X	X	X			CQ	0	X	X	X	X							Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1		2		3										3																										
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Multi-step change-over switches

plate	diagram	function	circuit diagram	contact/element description	element no.																																																																																											
	MZ13	Multi step switch with OFF 1 pole 3 steps		<table border="1"> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> </tr> <tr> <td>2</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CA 45°</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td></td> <td>Angle</td> </tr> <tr> <td>Element</td> <td>1</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	3										CR	2	X									CA 45°	1				X						CQ	0											Contact	1	2	3	4	5	6	7	8		Angle	Element	1	2									2																									
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Element	1	2																																																																																														
	MZ14	Multi step switch with OFF 1 pole 4 steps		<table border="1"> <tr> <td>4</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td>CA 45°</td> </tr> <tr> <td>2</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td></td> <td>Angle</td> </tr> <tr> <td>Element</td> <td>1</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	4			X							CR	3								X		CA 45°	2	X									CQ	1				X							0											Contact	1	2	3	4	5	6	7	8		Angle	Element	1	2									2														
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	MZ23	Multi step switch with OFF 2 pole 3 steps		<table border="1"> <tr> <td>3</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CA 45°</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td>1</td> <td>2</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	3	X	X								CR	2			X	X						CA 45°	1					X	X				CQ	0											Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1	2	3											3																			
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	MZ24	Multi step switch with OFF 2 pole 4 steps		<table border="1"> <tr> <td>4</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td>X</td> <td>CA 45°</td> </tr> <tr> <td>2</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	4			X	X						CR	3					X	X			X	CA 45°	2	X									CQ	1								X			0											Contact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Angle	Element	1	2	3	4														4
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	MZ33	Multi step switch with OFF 3 pole 3 steps		<table border="1"> <tr> <td>3</td> <td>X</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>CA 45°</td> </tr> <tr> <td>1</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>CQ</td> </tr> <tr> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td>1</td> <td>2</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	3	X			X	X					CR	2			X	X					X	CA 45°	1		X						X	X	CQ	0											Contact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Angle	Element	1	2	3																			5			
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Multi-step change-over switches																																																																	
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	M013	Multi step switch without OFF 1 pole 3 steps		<table border="1"> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td>CR</td> <td rowspan="3">45°</td> </tr> <tr> <td>2</td> <td>X</td> <td></td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td>X</td> <td></td> <td>CQ</td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td colspan="2">1</td> <td colspan="2">2</td> <td colspan="4"></td> </tr> </table>	3					CR	45°	2	X				CA	1			X		CQ	Contact	1	2	3	4	5	6	7	8	Angle	Element	1		2						2																						
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	M014	Multi step switch without OFF 1 pole 4 steps		<table border="1"> <tr> <td>4</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>CR</td> <td rowspan="3">45°</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>CA</td> </tr> <tr> <td>2</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td colspan="2">1</td> <td colspan="2">2</td> <td colspan="4"></td> </tr> </table>	4			X			CR	45°	3					X	CA	2	X					CQ	Contact	1	2	3	4	5	6	7	8	Angle	Element	1		2						2																			
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	M015	Multi step switch without OFF 1 pole 5 steps		<table border="1"> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>CR</td> <td rowspan="4">45°</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td>CA</td> </tr> <tr> <td>3</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CQ</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Contact</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>Angle</td> </tr> <tr> <td>Element</td> <td colspan="2">1</td> <td colspan="2">2</td> <td colspan="2">3</td> <td colspan="5"></td> </tr> </table>	5						X	CR	45°	4				X			CA	3	X						CQ	2			X					Contact	1	2	3	4	5	6	7	8	9	10	11	12	Angle	Element	1		2		3							3	
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