












Protection Relays:-

Relay Name	Image	Features	Output Contact	Order Code
Phase Sequence Relay		<ul style="list-style-type: none"> <li>• 3Ø / 3 wire input</li> <li>• Monitors:- Phase sequence, Phase failure, Phase imbalance.</li> <li>• LED Indication : Relay, Fault, DIN Rail / Base Mounting</li> </ul>	SPDT (1 C/O)	PSR – 415V
Voltage Protection Relay		<ul style="list-style-type: none"> <li>• 3Ø / 3 wire input</li> <li>• Monitors :- Phase Sequence, Phase Failure, L-L Under/ Over Voltage.</li> <li>• LED Indication : Relay, Fault</li> <li>• DIN Rail / Base Mounting</li> </ul>	SPDT (1 C/O)	VPR-415V

Relay Name	Image	Features	Input Voltage	Order Code
High Frequency Opto Interface Module  Operating Frequency : Upto 200 KHz		<ul style="list-style-type: none"> <li>• 4 Channel</li> <li>• Optical Isolation between Input &amp; Output</li> <li>• Aux Supply : 24VDC</li> <li>• Wide Input Voltage Range</li> <li>• High Speed Operation upto 200KHz</li> <li>• 24V Output or Open Collector</li> <li>• Compatible with PNP &amp; NPN type</li> <li>• Inputs Suitable for Microcontrollerbased Application</li> </ul>	3 ~ 12V	AS923-101
			12 ~ 30V	AS923-102

Low Power SlimSMPS HSN : 85044090	Input	Output		Order Code
		Voltage DC	Current at Nominal Input	
 <p><b>6W</b></p>	90 to 270V AC 110 to 360V DC	5V	1.2A	G38-06-05
		12V	500mA	G38-06-12
		15V	400mA	G38-06-15
		24V	250mA	G38-06-24
General Purpose SMPS DIN Rail + Screw Mounting HSN : 85044090	Input	Output		Order Code
Voltage DC		Current at Nominal Input		
 <p><b>60W</b></p>	Nominal : 230V AC/DC	12V	5.0A	BL1250
		24V	2.5A	BL2425
 <p><b>120W</b></p>	Nominal : 230V AC/DC	24V	5.0A	BL2450
SMPS HSN : 85044090	Input	Output		Order Code
Voltage DC		Current at Nominal Input		
 <p><b>24W</b></p>	Nominal : <b>230VAC/DC</b> *With de- rating :100 to 270VAC 110 to 360VDC	5V	2.5A	G31-24-05
		12V	2A	G31-24-12
		15V	1.5A	G31-24-15
		<b>24V</b>	<b>1A</b>	<b>G31-24-24</b>
		48V	0.5A	G31-24-48
	Nominal : <b>110VAC/DC</b>	5V	2.5A	G32-24-05
		12V	2A	G32-24-12
		15V	1.5A	G32-24-15
		<b>24V</b>	<b>1A</b>	<b>G32-24-24</b>
		48V	0.5A	G32-24-48
 <p><b>CE</b></p>	Nominal : <b>230VAC/DC</b> *With de- rating :100 to 270VAC 110 to 360VDC	5V	5A	G31-60-05
		12V	5A	G31-60-12
		15V	4A	G31-60-15
		<b>24V</b>	<b>2.5A</b>	<b>G31-60-24</b>
		48V	1.25A	G31-60-48
		5V	5A	G32-60-05

<p><b>60W (CE marked)</b></p>	<p>Nominal : <b>110VAC/DC</b></p>	12V	5A	G32-60-12
		15V	4A	G32-60-15
		<b>24V</b>	<b>2.5A</b>	<b>G32-60-24</b>
		48V	1.25A	G32-60-48
 <p><b>120W (CE marked)</b></p>	<p>Nominal : <b>230VAC/DC</b> *With de-rating :100 to 270VAC 110 to 360VDC</p>	12V	8A	G31-120-12
		15V	8A	G31-120-15
		<b>24V</b>	<b>5A</b>	<b>G31-120-24</b>
		48V	2.5A	G31-120-48
	<p>Nominal : <b>110VAC/DC</b></p>	12V	8A	G32-120-12
		15V	8A	G32-120-15
		<b>24V</b>	<b>5A</b>	<b>G32-120-24</b>
		48V	2.5A	G32-120-48
 <p><b>250W</b></p>	<p>Nominal : <b>230VAC/DC</b></p>	12V	20A	G31-250-12
		15V	15A	G31-250-15
		<b>24V</b>	<b>10A</b>	<b>G31-250-24</b>
		30V	8A	G31-250-30
		48V	5A	G31-250-48
	<p>Nominal : <b>110VAC/DC</b></p>	<b>24V</b>	<b>10A</b>	<b>G32-250-24</b>
		30V	8A	G32-250-30
		48V	5A	G32-250-48
 <p><b>360W</b></p>	<p>Nominal : <b>230VAC/DC</b></p>	12V	30A	G31-360-12
		<b>24V</b>	<b>15A</b>	<b>G31-360-24</b>
		36V	10A	G31-360-36
 <p><b>500W</b></p>	<p>Nominal : <b>230VAC/DC</b></p>	<b>24V</b>	<b>20A</b>	<b>G31-500-24</b>
		48V	10A	G31-500-48

<p><b>SMPS</b> HSN : 85044090</p>	<p><b>Input</b></p>	<p><b>Output</b></p>		<p><b>Order Code</b></p>
		<p><b>Voltage DC</b></p>	<p><b>Current at Nominal Input</b></p>	
	<p>Nominal : <b>230VAC/DC</b>  *With de-rating: 100 to 270VAC</p>	+5V	5A	G31-70-05-05
		-5V	1.5A	
		+12V	4A	G31-70-12-12
		-12V	1.5A	
		+15V	3A	G31-70-15-15
		-15V	1.5A	
		+24V	2A	G31-70-24-05
		+5V	1.5A	



**70W  
Dual Output**

110 to 360VDC	+24V	2A	G31-70-24-12	
	+12V	1.5A		
	+12V	4A		
	Nominal : 110VAC/DC	+5V	1.5A	G31-70-12-05
		+5V	5A	G32-70-05-05
		-5V	1.5A	
		+12V	4A	G32-70-12-12
		-12V	1.5A	
		+15V	3A	G32-70-15-15
		-15V	1.5A	
		+24V	2A	G32-70-24-05
		+5V	1.5A	
		+24V	2A	G32-70-24-12
	+12V	1.5A		
+12V	4A	G32-70-12-05		
+5V	1.5A			

DC – DC Converter			
HSN : 85044090			
Input	Output		Order Code



**24W**

Nominal : <b>24VDC</b> Input Range : 18 to 36VDC	5VDC : 2.5A		G34-24-05
	12VDC : 2A		G34-24-12
	24VDC : 1A		G34-24-24



**120W**

Nominal : <b>24VDC</b> Input Range :18 to 36VDC	24VDC : 4A		G34-120-24
	Nominal : <b>- 48VDC</b> Input Range : -38 to -60VDC	24VDC : 5A	



**70W  
Dual Output**

Nominal : <b>48VDC</b> Input Range :38 to 60VDC	+15V : 3A		G35-70-15-15
	-15V : 1.5A		

Open Frame SMPS HSN : 85044090	Input	Output		Order Code
		Voltage DC	Current at Nominal Input	
 <p><b>24W Single O/P</b></p>	Nominal : <b>230VAC/DC</b>  *With de-rating:100 to 270VAC 110 to 350VDC	5V	2.5A	AS348-111
		12V	2A	AS348-113
		15V	1.5A	AS348-114
		24V	1A	AS348-115
		48V	0.5A	AS348-116
	Nominal : <b>110VAC/DC</b>	5V	2.5A	AS348-151
		12V	2A	AS348-153
		15V	1.5A	AS348-154
		24V	1A	AS348-155
		48V	0.5A	AS348-156
 <p><b>60W Single O/P</b></p>	Nominal : <b>230VAC/DC</b>	12V	5A	AS464-102
		15V	4A	AS464-103
		24V	2.5A	AS464-104
		36V	1.6A	AS464-105
		28V	2A	AS464-106
	Nominal : <b>110VAC/DC</b>	12V	5A	AS464-152
		15V	4A	AS464-153
		24V	2.5A	AS464-154
		36V	1.6A	AS464-155
		28V	2A	AS464-156
Dual Output Open Frame SMPS HSN : 85044090	Input	Output		Order Code
	Nominal : <b>230VAC/DC</b>	5V : 2.5A	12V : 2A*	AS469-101
		5V : 2.5A	24V : 1A*	AS469-102
		+15V : 1.5A	-15V : 1.5A*	AS469-103
		12V : 1.5A	12V : 1.5A*	AS469-104
		8V : 250mA	17V : 1.5A*	AS469-106
		5V : 2.5A	-5V : 100mA	AS469-115
Nominal :	5V : 2.5A	12V : 2A*	AS469-151	
	5V : 2.5A	24V : 1A*	AS469-152	
	+15V : 1.5A	-15V : 1.5A*	AS469-153	



**25W Dual O/P**

110VAC/DC

12V : 1.5A	12V : 1.5A*	AS469-154
8V : 250mA	17V : 1.5A*	AS469-156

Open Frame SMPS HSN : 85044090	Input	Output	Order Code
 <b>CPU Type I/O Connector</b>	Nominal : <b>230VAC/DC</b>	5V : 1A +/- 5V : 100mA +/- 12V : 250mA 34V : 1.5A	AS492-101C
		12V : 750mA +/- 5V : 350mA 24V : 50mA	AS492-102C
		12V : 350mA 15V : 2A OR 30V : 2A 5V : 350mA	AS492-103C
		12V : 350mA 15V : 2A OR 30V : 2A 5V : 350mA	AS492-104C
		5V : 1A 24V : 2.5A 5V : 500mA	AS492-105C
		5V : 1A +/- 5V : 100mA +/- 12V : 250mA 24V : 1.5A	AS492-106C
		5V : 2A 12V : 1.5A 24V : 600mA	AS492-107C
		5V:2A -5V:0.3A 12V:0.3A 24V:1.5A	AS492-108C
		5V : 2A - 5V : 300mA 12V : 300mA 48V : 1.5A	AS492-109C
		5V : 1A +/- 5V : 100mA +/- 12V : 250mA 13V : 1.5A	AS492-111C
90 - 270VAC			
90 - 270VAC			
230VAC/DC			

**CPU Type I/O Connector**



**Screw Type I/O Terminals**

**60W\* Multiple O/P**

SMPS - Accessories HSN : 85437099	Description	Current Rating		Input	Order Code
		Redundant	Parallel		
				12VDC	AS451-101
				24VDC	AS451-102



**Redundancy /  
Paralleling Modules**

- 2C/O Monitor relay across each power supply

20A	40A	48VDC	AS451-103
		15VDC	AS451-104
10A	20A	12VDC	AS452-101
		24VDC	AS452-102
		48VDC	AS452-103
		110VDC	AS452-105

HSN : 85369090



**Power Distribution  
Modules**

Description	Order Code
<ul style="list-style-type: none"> <li>• Voltage Rating : 100VDC / 230VAC</li> <li>• Current Rating Input : 10A max.</li> <li>• Current Rating Output : 5A per channel</li> <li>• Input side : 1 x 2 way Terminals</li> <li>• Output side : 6 x 2 way Terminals</li> </ul>	AS331
<ul style="list-style-type: none"> <li>• Voltage Rating : 100VDC / 230VAC</li> <li>• Current Rating Input : 20A max.</li> <li>• Current Rating Output : 5A per channel</li> <li>• Input side : 2 x 2 way Terminals</li> <li>• Output side : 12 x 2 way Terminals</li> </ul>	AS333

**Battery Charger**

HSN : 85044030





**120W**




**250W**

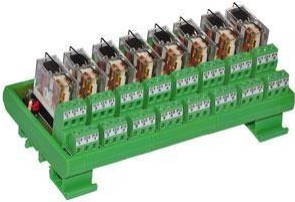

Input	Output		Order Code
	Voltage DC	Current at Nominal Input	
Nominal : <b>230VAC</b>  With Fan	12V	10A	BCW-1210
	Nominal : <b>230VAC</b>  Without Fan	24V	5A
Nominal : <b>230VAC</b>	12V	20A	BCD-1220
	24V	10A	BCD-2410
	36V	6A	BCD-3606



 <p><b>500W</b></p>	Nominal : <b>230VAC</b>	48V	5A	BCD-4805
		24V	20A	BCD-2420
		36V	13A	BCD-3613
		48V	10A	BCD-4810

<b>Voltage Monitor Relay</b> HSN : 91070000	<b>Operation</b>	<b>Input Range</b>	<b>Supply Voltage</b>	<b>Order Code</b>
<p>Applications :</p> <ul style="list-style-type: none"> <li>• Voltage Monitoring</li> <li>• Dynamic Braking Resistor Protection</li> </ul>  <p><b><u>Voltage Monitor Relay</u></b></p>	<ul style="list-style-type: none"> <li>• Monitors DC input voltage and triggers internal timer when input voltage goes above set voltage.</li> <li>• After Set time delay (0-60 sec), Relay change over occurs.</li> <li>• Resets if input voltage comes down below set voltage</li> </ul>	0 – 10VDC Or 0 – 100VDC	85 – 270VAC	AS690-101
		0 – 50VDC Or 0 – 500VDC		AS690-102
		0 – 10VDC Or 0 – 100VDC	24VAC/DC	AS690-201
		0 – 50VDC Or 0 – 500VDC		AS690-202

<b>General Purpose Relay Modules</b> HSN : 85369090	<b>Description</b>	<b>Relay Socket</b>	<b>No. of Channels</b>	<b>Order Code</b>
 <p><b><u>1 C/O General Purpose</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• 24VDC Coil</li> <li>• -Ve / +Ve or isolated looping by jumpers (site selectable)</li> <li>• <b>OEN Relay</b></li> </ul>	Socket Mounted	4	GP04-1C-24V-S-OE
			8	GP08-1C-24V-S-OE
			16	GP16-1C-24V-S-OE



 <p><b><u>2 C/O General Purpose</u></b></p>	<ul style="list-style-type: none"> <li>• <b>2 C/O</b> Contacts</li> <li>• 24VDC Coil</li> <li>• -Ve / +Ve or isolated looping by jumpers (site selectable)</li> <li>• <b>OEN Relay</b></li> </ul>	Socket Mounted	4	GP04-2C-24V-S-OE
			8	GP08-2C-24V-S-OE
 <p><b><u>1 C/O Fuse at pole General Purpose</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• 24VDC Coil</li> <li>• -Ve / +Ve or isolated looping by jumpers (site selectable)</li> <li>• <b>OEN Relays</b></li> </ul>	Socket Mounted	4	GPF04-1C-24V-S-OE
			8	GPF08-1C-24V-S-OE

<b>Relay Modules</b> HSN : 85369090		Description	Relay Socket	No. of Channels	Order Code
 <p><b><u>1 N/O Economy</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 N/O</b> Contacts</li> <li>• Reverse blocking diode</li> <li>• -Ve looped</li> <li>• 24VDC Coil</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered	4	AS383-24V-N-OE	
			8	AS385-24V-N-OE	
		Socket Mounted	4	AS383-24V-N-S-OE	
			8	AS385-24V-N-S-OE	
 <p><b><u>1 C/O Standard</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• Reverse blocking diode</li> <li>• 24VDC Coil</li> <li>• -Ve / +Ve or isolated looping by jumpers (site selectable)</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered	1	AS361-24V-OE	
			2	AS362-24V-OE	
			4	AS363-24V-OE	
			8	AS365-24V-OE	
			12	AS366-24V-OE	
			16	AS367-24V-OE	
		Socket Mounted	1	AS361-24V-S-OE	
			2	AS362-24V-S-OE	
			4	AS363-24V-S-OE	
			8	AS365-24V-S-OE	
			12	AS366-24V-S-OE	
			16	AS367-24V-S-OE	

Relay Modules HSN : 85369090		Description	Relay Socket	No. of Channels	Order Code
 <p><b><u>1 C/O Looped Coils</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• Reverse blockingdiode</li> <li>• -Ve looped ( Factory set )</li> <li>• 24VDC Coil OR +Ve looped</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered	4	AS353-24V-N-OE	
			8	AS355-24V-N-OE	
			12	AS356-24V-N-OE	
			16	AS357-24V-N-OE	
		Socket Mounted	4	AS353-24V-N-S-OE	
			8	AS355-24V-N-S-OE	
			12	AS356-24V-N-S-OE	
16	AS357-24V-N-S-OE				
 <p><b><u>1 C/O Sugar cube Looped Coils</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• Reverse blockingdiode</li> <li>• -Ve looped ( Factory set )</li> <li>• 24VDC Coil OR +Ve looped</li> <li>• <b>Sun hold Relay</b></li> </ul>	Directly Soldered	1	AS401-24V-N-SH	
			2	AS402-24V-N-SH	
			4	AS403-24V-N-SH	
			8	AS405-24V-N-SH	
			12	AS406-24V-N-SH	
			16	AS407-24V-N-SH	
 <p><b><u>1 C/O Sugar cube Isolated Coils</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• Reverse blockingdiode</li> <li>• 24VDC Coil</li> <li>• Isolated Coils</li> <li>• <b>Sun hold Relays</b></li> </ul>	Directly Soldered	1	AS411-24V-SH	
			2	AS412-24V-SH	
			4	AS413-24V-SH	
			8	AS415-24V-SH	
			12	AS416-24V-SH	
			16	AS417-24V-SH	
 <p><b><u>1 C/O High Volt. Coils</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• 230VAC Coil*</li> <li>• Isolated Coils</li> <li>• <b>OEN Relays</b></li> </ul>	Directly Soldered	1	AS421-230VAC-OE	
			2	AS422-230VAC-OE	
			4	AS423-230VAC-OE	
			6	AS424-230VAC-OE	
			8	AS425-230VAC-OE	
			16	AS427-230VAC-OE	
	Socket Mounted	1	AS421-230VAC-S-OE		
		2	AS422-230VAC-S-OE		
		4	AS423-230VAC-S-OE		
		6	AS424-230VAC-S-OE		
		8	AS425-230VAC-S-OE		
		16	AS427-230VAC-S-OE		
		4	AS423-110VAC-S-OE		
Socket Mounted	8	AS425-110VAC-S-OE			
	16	AS427-110VAC-S-OE			
	4	AS423-110VAC-S-OE			
<ul style="list-style-type: none"> <li>• <b>1 C/O</b> Contacts</li> <li>• 24VAC Coil*</li> <li>• Isolated Coils</li> <li>• <b>OEN Relays</b></li> </ul>	Directly Soldered	1	AS621-24VAC-OE		
		2	AS622-24VAC-OE		
		4	AS623-24VAC-OE		
		6	AS624-24VAC-OE		
		8	AS625-24VAC-OE		
		1	AS621-24VAC-S-OE		
	Socket	2	AS622-24VAC-S-OE		
		4	AS623-24VAC-S-OE		





**1 C/O 24VAC Coils**


	Mounted	6	AS624-24VAC-S-OE
		8	AS625-24VAC-S-OE

<b>Relay Modules</b> HSN : 85369090		Description	Relay Socket	No. of Channels	Order Code
<p><b><u>1 C/O Fuse at pole with Fuse Fail Indication</u></b></p>	<ul style="list-style-type: none"> <li>• <b><u>1 C/O</u></b> Contacts</li> <li>• Reverse blocking diode</li> <li>• -Ve looped ( Factory set ) 24VDC Coil OR +Ve looped</li> <li>• <b><u>OEN Relays</u></b></li> </ul>	Directly Soldered	1	AS501-24V-N-OE-24VDC-2A	
			2	AS502-24V-N-OE-24VDC-2A	
			4	AS503-24V-N-OE-24VDC-2A	
			6	AS504-24V-N-OE-24VDC-2A	
			8	AS505-24V-N-OE-24VDC-2A	
			16	AS507-24V-N-OE-24VDC-2A	
		Socket Mounted	1	AS501-24V-N-S-OE-24VDC-2A	
			2	AS502-24V-N-S-OE-24VDC-2A	
			4	AS503-24V-N-S-OE-24VDC-2A	
			6	AS504-24V-N-S-OE-24VDC-2A	
			8	AS505-24V-N-S-OE-24VDC-2A	
			16	AS507-24V-N-S-OE-24VDC-2A	
		<p><b><u>1 C/O with High voltage Coil &amp; Fuse at poles with Fuse Fail</u></b></p>	<ul style="list-style-type: none"> <li>• <b><u>1 C/O</u></b> Contacts</li> <li>• 230VAC Coil*</li> <li>• Isolated Coils</li> <li>• <b><u>OEN Relays</u></b></li> </ul>	Directly Soldered	1
2	AS802-230VAC-OE-24VDC-5A				
4	AS803-230VAC-OE-24VDC-5A				
8	AS805-230VAC-OE-24VDC-5A				
Socket Mounted	1			AS801-230VAC-S-OE-24VDC-5A	
	2			AS802-230VAC-S-OE-24VDC-5A	
	4			AS803-230VAC-S-OE-24VDC-5A	
	8			AS805-230VAC-S-OE-24VDC-5A	
Socket Mounted	4			AS803-110VAC-S-OE-24VDC-5A	
	8			AS805-110VAC-S-OE-24VDC-5A	

**Indication**

<b>Relay Modules</b> HSN : 85369090		<b>Descrip tion</b>	<b>Relay Socket</b>	<b>No. of Channels</b>	<b>Order Code</b>
 <p>102mm  -55mm- </p> <p><b><u>1 C/O Space Saver</u></b></p>	<ul style="list-style-type: none"> <li>• <b>1C/O</b> Contacts</li> <li>• Reverse blocking diode</li> <li>• <b>OEN Relays</b></li> </ul>	Directly Soldered	8	AS789-24V-N-OE ( For -Ve looped coils )	
				AS789-24V-P-OE ( For +Ve looped coils )	

<b>Relay Modules</b> HSN : 85369090		<b>Description</b>	<b>Relay Socket</b>	<b>No. of Channels</b>	<b>Order Code</b>
 <p><b><u>2 C/O Standard</u></b></p>	<ul style="list-style-type: none"> <li>• <b>2 C/O</b> Contacts</li> <li>• Reverse blocking diode</li> <li>• 24VDC Coil</li> <li>• -Ve / +Ve or isolated looping by jumpers (site selectable)</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered	1	AS391-24V-OE	
			2	AS392-24V-OE	
			4	AS393-24V-OE	
			8	AS395-24V-OE	
			12	AS396-24V-OE	
			16	AS397-24V-OE	
		Socket Mounted	1	AS391-24V-S-OE	
			2	AS392-24V-S-OE	
			4	AS393-24V-S-OE	
			8	AS395-24V-S-OE	
			12	AS396-24V-S-OE	
			16	AS397-24V-S-OE	








<b>Relay Modules</b> HSN : 85369090		<b>Description</b>	<b>Relay Socket</b>	<b>No. of Channels</b>	<b>Order Code</b>
 <p><b><u>2 C/O Looped Coils</u></b></p>	<ul style="list-style-type: none"> <li>• <b>2 C/O</b> Contacts</li> <li>• Reverse blocking diode</li> <li>• -Ve looped ( Factory set ) 24VDC Coil OR +Ve looped</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered	4	AS373-24V-N-OE	
			8	AS375-24V-N-OE	
			12	AS376-24V-N-OE	
			16	AS377-24V-N-OE	
		Socket Mounted	4	AS373-24V-N-S-OE	
			8	AS375-24V-N-S-OE	
			12	AS376-24V-N-S-OE	
			16	AS377-24V-N-S-OE	
			1	AS431-230VAC-OE	
			2	AS432-230VAC-OE	




**2 C/O**  
**High Voltage Coils**


<ul style="list-style-type: none"> <li>• <b><u>2 C/O</u></b> Contacts</li> </ul>	Directly Soldered	4	AS433-230VAC-OE
		8	AS435-230VAC-OE
<ul style="list-style-type: none"> <li>• 230VAC Coil*</li> <li>• Isolated Coils</li> <li>• <b>OEN Relays</b></li> </ul>	Socket Mounted	1	AS431-230VAC-S-OE
		2	AS432-230VAC-S-OE
		4	AS433-230VAC-S-OE
		8	AS435-230VAC-S-OE
<ul style="list-style-type: none"> <li>• 110VAC Coil*</li> </ul>	Socket Mounted	4	AS433-110VAC-S-OE
		8	AS435-110VAC-S-OE


<b>Relay Modules Special</b> HSN : 85369090		Description	Relay Socket	No. of Channels	Order Code
<p><b><u>Coil Connection through FRC / HE</u></b> <b><u>10</u></b></p>	<ul style="list-style-type: none"> <li>• <b><u>1N/O</u></b> Contacts</li> <li>• Reverse blocking diode</li> <li>• -Ve looped (Factory set) 24VDC Coil</li> <li>• <b>OEN Relays</b></li> </ul>	Directly Soldered	16	AS334-24V-N-OE	
		Socket Mounted		AS334-24V-N-S-OE	
<p><b><u>1 C/O 30A Contacts</u></b></p>	<ul style="list-style-type: none"> <li>• <b><u>1C/O</u></b> Contacts Rated for 30 Amps</li> <li>• Reverse blocking diode</li> <li>• Isolated Coils</li> </ul>	Directly Soldered	1	AS548-101-24V	
			2	AS548-102-24V	
<p><b><u>1 C/O 30A Contacts High Voltage Coils</u></b></p>	<ul style="list-style-type: none"> <li>• <b><u>1C/O</u></b> Contacts Rated for 30 Amps</li> <li>• 230VAC Coil *</li> <li>• Isolated Coils</li> </ul>	Directly Soldered	1	AS701-230VAC-30A	
			2	AS702-230VAC-30A	
			4	AS703-230VAC-30A	
			6	AS704-230VAC-30A	
			8	AS705-230VAC-30A	


Relay Modules Special HSN : 85369090		Description	Relay Socket	No. of Channels	Order Code
 <b>Generator Control Interface</b>	<ul style="list-style-type: none"> <li>• <b>1 N/O</b> 70A rated Contacts</li> <li>• <b>1 C/O</b> 5A rated Contacts</li> <li>• Reverse Blocking Diode</li> </ul>	Directly Soldered	4	AS547-101 (12VDC Coil)	
				AS547-102 (24VDC Coil)	
 <b>2 C/O, High Sensitivity</b>	<ul style="list-style-type: none"> <li>• <b>2 C/O</b> Contacts</li> <li>• Signal Relays</li> <li>• Reverse Blocking Diode</li> <li>• 24VDC Coil</li> <li>• Coil looping by jumpers</li> </ul>	Directly Soldered	2	AS682-24V-G5V	
			4	AS683-24V-G5V	
 <b>1 N/O with Coil Thru FRC</b>	<ul style="list-style-type: none"> <li>• <b>1 N/O</b> Contacts</li> <li>• Coil Conn. Through FRC</li> <li>• Reverse Blocking Diode</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered	8	AS298-101	
 <b>CNC Specific Relay Module</b>	<b>Description</b>		<b>Relay Socket</b>	<b>Order Code</b>	
	<ul style="list-style-type: none"> <li>• 50 pin Male FRC Conn.</li> <li>• 24 Inputs, 24VDC each</li> <li>• 16 channel, <b>1 C/O</b> Relays</li> <li>• <b>OEN Relay</b></li> </ul>		Directly Soldered	AS717-OE	
			Socket Mounted	AS717-S-OE	
 <b>2 C/O, with FRC conn. Input &amp; Cascading</b>	<ul style="list-style-type: none"> <li>• <b>8 Relays</b></li> <li>• <b>2 C/O</b> Contacts</li> <li>• +Ve looped</li> <li>• 24VDC Coil</li> <li>• <b>OEN Relay</b></li> </ul>	Directly Soldered		AS296-24V-OE	
		Socket Mounted		AS296-24V-S-OE	
 <b>1 C/O TTL/Low current input</b>	<ul style="list-style-type: none"> <li>• <b>4 Relays</b></li> <li>• <b>8 Relays</b></li> <li>• <b>1 C/O</b> Contacts</li> <li>• TTL/Low current Input</li> <li>• <b>OEN Relay</b></li> </ul>	5V, 1mA	Aux. (Coil) Voltage	24V	AS253-5V-24V-OE
			12V	AS254-5V-12V-OE	
		24V, 5mA	24V	AS254-5V-24V-OE	
			12V	AS254-24V-12V-OE	
			24V	AS254-24V-24V-OE	
 <b>1 C/O, Low Signal Relays, TTL/Low current input</b>	<ul style="list-style-type: none"> <li>• <b>8 Relays</b></li> <li>• <b>1 C/O</b> Contacts</li> <li>• TTL/Low current Input</li> <li>• Low Signal Relays</li> <li>• <b>Omron G5V-1 Relay</b></li> </ul>	5V, 1mA	24V	AS535-5V-24V-G5V	
		24V, 5mA	24V	AS535-24V-24V-G5V	



 <p><b><u>2 C/O, TTL/Low current input</u></b></p>	<ul style="list-style-type: none"> <li>• <b>8 Relays</b></li> <li>• <b>2 C/O</b> Contacts</li> <li>• TTL/Low current Input</li> <li>• <b>OEN Relay</b></li> </ul>	5V, 1mA	12V	AS339-5V-12V-OE
			24V	AS339-5V-24V-OE
		24V, 5mA	12V	AS339-24V-12V-OE
			24V	AS339-24V-24V-OE

Relay Modules Special HSN : 85369090	Description	Input	Aux.(Coil) Voltage	Order Code
 <p><b><u>2 C/O, With opto input</u></b></p> <p><a href="http://www.shavison.com/pdf/12800.pdf">http://www.shavison.com/pdf/12800.pdf</a></p>	<ul style="list-style-type: none"> <li>• <b>4 Relays</b></li> <li>• <b>2 C/O</b> Contacts</li> <li>• Opto Input 10mA</li> <li>• <b>OEN Relay</b></li> </ul>	5V	12V	AS720-5V-12V-OE
			24V	AS720-5V-24V-OE
		24V	12V	AS720-24V-12V-OE
			24V	AS720-24V-24V-OE

Isolated : SSR HSN : 85369090	Description	No. of Channels	Input Voltage	Order Code
 <p><b><u>(Solenoid Driver) SSR : DC - DC</u></b></p>	<ul style="list-style-type: none"> <li>• Life 100 times more than electro mech. Relay</li> <li>• Input current &lt;10mA               <ul style="list-style-type: none"> <li>• Output 12V ~ 48VDC, 1.5A</li> </ul> </li> <li>• Operating Freq. upto 10KHz</li> <li>• Fuse at output</li> </ul>	4	3.3 ~ 30V	AS893-101
		8	3.3 ~ 30V	AS895-101

 <p><b><u>SSR : DC - DC</u></b></p>	<ul style="list-style-type: none"> <li>• Optical Isolation between I/O</li> <li>• Input current &lt;15mA</li> <li>• Output 24VDC, 2A</li> <li>• Operating Freq. upto 10KHz</li> <li>• <i>Not for Inductive Loads</i></li> </ul>	2	12V	AS782-12V-24V
			24V	AS782-24V-24V
		4	12V	AS783-12V-24V
			24V	AS783-24V-24V
		8	12V	AS785-12V-24V
			24V	AS785-24V-24V
<ul style="list-style-type: none"> <li>• Optical Isolation between I/O</li> <li>• Input current 15mA</li> <li>• Output</li> </ul>	4	12V	AS793-12V-230VAC-2A	
		24V	AS793-24V-230VAC-2A	
		12V	AS795-12V-230VAC-2A	



**SSR : DC - AC**

- 70-270VAC,2A
- Operating Freq.upto 25Hz
- Fuse at output

8	24V	AS795-24V-230VAC-2A
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**Non-Isolated : SSR**  
HSN : 85369090



(Solenoid Driver)  
**SSR : DC - DC**

- Life 100 timesmore than electro mech. Relay
- Input current15mA
- High/Low Input selection with jumpers (site selectable)
- Output 24VDC,2.5A
- Operating Freq.upto 10KHz
- Fuse at output

No. of Channels	Input Voltage	Order Code
2	12V	AS772-12V-24V
	24V	AS772-24V-24V
4	12V	AS773-12V-24V
	24V	AS773-24V-24V
8	12V	AS775-12V-24V
	24V	AS775-24V-24V

**Opto Interface**  
HSN : 85369090



**DC Input Opto Isolator/ Level Shifter / NPN / PNP Converter**

- Optical Isolation between I/O
- Input current < 15mA
  - Output 5V-30VDC, 15mA

No. of Channels	Input Voltage	Order Code
2	12V	AS522-12V
	24V	AS522-24V
4	12V	AS523-12V
	24V	AS523-24V
8	3.3V**	AS525-3.3V
	12V	AS525-12V
	24V	AS525-24V
	1.3 ~ 1.8V**	AS525-152



**AC Input Opto Isolator**

2	230VAC	AS852-230VAC
4	230VAC	AS853-230VAC
8	230VAC	AS855-230VAC


**FRC / D-SUB (M/F) Connector To Wire**  
HSN : 85369090

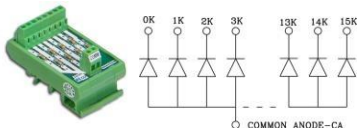
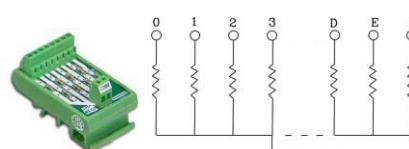
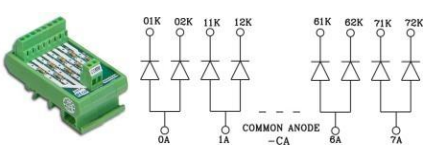
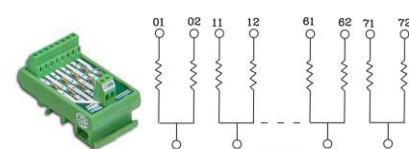


- Voltage Rating : 100VDC

No. of Pins	Order Code
10	AS581
14	AS582
16	AS583
20	AS584
26	AS585
34	AS586



 <p><b><u>FRC to Screw Connector</u></b></p>	<ul style="list-style-type: none"> <li>• Current Rating : 500mA</li> </ul>	<table border="1"> <tr><td>40</td><td>AS587</td></tr> <tr><td>50</td><td>AS588</td></tr> <tr><td>60</td><td>AS589</td></tr> <tr><td>64</td><td>AS590</td></tr> </table>	40	AS587	50	AS588	60	AS589	64	AS590														
40	AS587																							
50	AS588																							
60	AS589																							
64	AS590																							
 <p><b><u>DSUB to Screw Connector</u></b></p>	<ul style="list-style-type: none"> <li>• Voltage Rating : 100VDC</li> <li>• Current Rating : 500mA</li> </ul>	<table border="1"> <tr><td>9</td><td>AS591-M</td></tr> <tr><td>15</td><td>AS592-M</td></tr> <tr><td>25</td><td>AS593-M</td></tr> <tr><td>37</td><td>AS594-M</td></tr> <tr><td>50 (3 row)</td><td>AS595-M-3 ROW</td></tr> </table>	9	AS591-M	15	AS592-M	25	AS593-M	37	AS594-M	50 (3 row)	AS595-M-3 ROW												
9	AS591-M																							
15	AS592-M																							
25	AS593-M																							
37	AS594-M																							
50 (3 row)	AS595-M-3 ROW																							
<p><b>CABLES FRC / D-SUB (M/F)</b> HSN : 85369090</p>	<p><b>Description</b></p>	<p><b>No. of Pins</b></p>	<p><b>Length</b></p>	<p><b>Order Code</b></p>																				
 <p><b><u>FRC</u></b></p>	<ul style="list-style-type: none"> <li>• Flat Ribbon Cable</li> <li>• Current Rating :500mA</li> <li>• Available lengths : 1M, 2.5M, 5M, 10M</li> </ul>	<table border="1"> <tr><td>10</td></tr> <tr><td>14</td></tr> <tr><td>16</td></tr> <tr><td>20</td></tr> <tr><td>26</td></tr> <tr><td>34</td></tr> <tr><td>40</td></tr> <tr><td>50</td></tr> <tr><td>60</td></tr> <tr><td>64</td></tr> </table>	10	14	16	20	26	34	40	50	60	64	<p>1 meter</p>	<table border="1"> <tr><td>WA-FRC-10P-1M</td></tr> <tr><td>WA-FRC-14P-1M</td></tr> <tr><td>WA-FRC-16P-1M</td></tr> <tr><td>WA-FRC-20P-1M</td></tr> <tr><td>WA-FRC-26P-1M</td></tr> <tr><td>WA-FRC-34P-1M</td></tr> <tr><td>WA-FRC-40P-1M</td></tr> <tr><td>WA-FRC-50P-1M</td></tr> <tr><td>WA-FRC-60P-1M</td></tr> <tr><td>WA-FRC-64P-1M</td></tr> </table>	WA-FRC-10P-1M	WA-FRC-14P-1M	WA-FRC-16P-1M	WA-FRC-20P-1M	WA-FRC-26P-1M	WA-FRC-34P-1M	WA-FRC-40P-1M	WA-FRC-50P-1M	WA-FRC-60P-1M	WA-FRC-64P-1M
10																								
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WA-FRC-50P-1M																								
WA-FRC-60P-1M																								
WA-FRC-64P-1M																								
 <p><b><u>DSUB Cable</u></b></p>	<ul style="list-style-type: none"> <li>• DSUB to DSUB Connector Cable</li> <li>• Current Rating :500mA</li> </ul>	<table border="1"> <tr><td>9</td></tr> <tr><td>15</td></tr> <tr><td>25</td></tr> <tr><td>37</td></tr> <tr><td>50 (3 row)</td></tr> </table>	9	15	25	37	50 (3 row)	<p>1 meter<sup>1</sup></p>	<table border="1"> <tr><td>WA-DSUB-9P-MM-1M</td></tr> <tr><td>WA-DSUB-15P-MM-1M</td></tr> <tr><td>WA-DSUB-25P-MM-1M</td></tr> <tr><td>WA-DSUB-37P-MM-1M</td></tr> <tr><td>WA-DSUB-50P-MM-1M</td></tr> </table>	WA-DSUB-9P-MM-1M	WA-DSUB-15P-MM-1M	WA-DSUB-25P-MM-1M	WA-DSUB-37P-MM-1M	WA-DSUB-50P-MM-1M										
9																								
15																								
25																								
37																								
50 (3 row)																								
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WA-DSUB-25P-MM-1M																								
WA-DSUB-37P-MM-1M																								
WA-DSUB-50P-MM-1M																								

<p><b>Proximity Sensor Interface</b> HSN : 85369090</p>	<p><b>Description</b></p>	<p><b>No. of Channels</b></p>	<p><b>Order Code</b></p>										
 <p><b><u>Proximity Sensor Interface</u></b></p>	<ul style="list-style-type: none"> <li>• PNP, NPN or Bipolar Indication by Jumpers</li> <li>• 24VDC Input</li> </ul>	<table border="1"> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>4</td></tr> <tr><td>6</td></tr> <tr><td>8</td></tr> </table>	1	2	4	6	8	<table border="1"> <tr><td>AS441-24V</td></tr> <tr><td>AS442-24V</td></tr> <tr><td>AS443-24V</td></tr> <tr><td>AS444-24V</td></tr> <tr><td>AS445-24V</td></tr> </table>	AS441-24V	AS442-24V	AS443-24V	AS444-24V	AS445-24V
1													
2													
4													
6													
8													
AS441-24V													
AS442-24V													
AS443-24V													
AS444-24V													
AS445-24V													

<b>Diode / Resistor Modules</b> HSN : 85369090		<b>Description</b>		<b>No. of Diodes / Resistors</b>	
 <p><b>Diodes Modules</b></p>		<ul style="list-style-type: none"> <li>• Common Anode / Cathode</li> <li>• Common Terminal rating 10A Max</li> </ul>		2 4 8 16	
 <p><b>Modules with Resistors</b></p>		<ul style="list-style-type: none"> <li>• Bussed Resistors</li> <li>• As per specifications</li> <li>• Common Terminal rating 10A max.</li> </ul>		2 4 8 16	
 <p><b>Diodes Modules</b></p>		<ul style="list-style-type: none"> <li>• Common Anode / Cathode</li> <li>• Common Terminal rating 10A Max</li> </ul>		1 2 4 8	
 <p><b>Modules with Resistors</b></p>		<ul style="list-style-type: none"> <li>• Dual Resistors</li> <li>• As per specifications</li> <li>• Common Terminal rating 10A max.</li> </ul>		1 2 4 8	
<b>Vibrator Control Card</b> HSN : 85437099		<b>Description</b>		<b>Order Code</b>	
 <p><b>Half wave phase controlled DC output</b></p>		<ul style="list-style-type: none"> <li>• Input : 230VAC, 47-63 Hz</li> <li>• Output : Half wave phase controlled DC, 2Amax.</li> <li>• Presets to set Coarse and fine control</li> <li>• Facility to connect external potentiometer or external 0 to 10VDC</li> <li>• DIN Rail Mountable</li> </ul>		AS780-101	
<b>Precision Reference Source</b> HSN : 85044090		<b>Description</b>		<b>Order Code</b>	
 <p><b>10VDC : 20mA</b></p>		<b>Description</b>		<b>Table<sup>1</sup></b>	
		<b>Linear Pot Value</b>		<b>No. of Pots</b>	
		1K		2	
		2K		4	
		5K		10	
		10K		20	
		<b>Input :</b> Nominal : 230VAC Input Range : 180 – 270VAC <b>Output :</b> 10VDC : 20mA		G31-24-10	

# Analog Signal Converters

HSN : 85437099



**Dual Isolated Output**

Analog Signal Converters HSN : 85437099	Input	Output 1	Output 2	Order Code	
				Aux Supply	
				90 ~ 270V AC	18 ~ 36V DC
0 - 20mV#	0 - 10VDC	0 - 10VDC	AS845-117	AS845-517	
	4 - 20mA	0 - 10VDC	<b>AS845-112</b>	AS845-512	
	4 - 20mA	4 - 20mA	AS845-118	AS845-518	
0 - 75mV	0 - 10VDC	0 - 10VDC	AS845-104	AS845-504	
	4 - 20mA	0 - 10VDC	<b>AS845-103</b>	AS845-503	
	4 - 20mA	4 - 20mA	AS845-105	AS845-505	
0 - 200mV	4 - 20mA	0 - 5VDC	AS845-203	AS845-523	
	0 - 10VDC	0 - 10VDC	AS845-119	AS845-519	
	4 - 20mA	0 - 10VDC	<b>AS845-111</b>	AS845-511	
0 - 1VDC	4 - 20mA	4 - 20mA	AS845-120	AS845-520	
	0 - 10VDC	0 - 10VDC	AS845-125	AS845-525	
	4 - 20mA	0 - 10VDC	AS845-126	AS845-526	
0 - 2VDC	4 - 20mA	4 - 20mA	AS845-127	AS845-527	
	0 - 10VDC	0 - 10VDC	AS845-128	AS845-528	
	4 - 20mA	0 - 10VDC	AS845-129	AS845-529	
0 - 2.5VDC	4 - 20mA	4 - 20mA	AS845-130	AS845-530	
	0 - 10VDC	0 - 10VDC	AS845-131	AS845-531	
	4 - 20mA	0 - 10VDC	AS845-132	AS845-532	
0 - 5VDC	4 - 20mA	4 - 20mA	AS845-133	AS845-533	
	0 - 10VDC	0 - 10VDC	AS845-134	AS845-534	
	4 - 20mA	0 - 10VDC	AS845-107	AS845-507	
-3 to +10VDC	4 - 20mA	4 - 20mA	AS845-135	AS845-535	
	4 - 20mA	0 - 5VDC	AS845-207	AS845-536	
	-3 to +10VDC	-3 to +10VDC	AS845-137	AS845-537	
0 - 10VDC	0 - 10VDC	0 - 10VDC	AS845-140	AS845-540	
	4 - 20mA	0 - 10VDC	<b>AS845-101</b>	AS845-501	
	4 - 20mA	4 - 20mA	AS845-152	AS845-552	
0 - 75VDC	0 - 20mA	0 - 20mA	AS845-139	AS845-539	
	0 - 10VDC	0 - 10VDC	AS845-141	AS845-541	
	4 - 20mA	0 - 10VDC	AS845-114	AS845-514	
0 - 120VDC	4 - 20mA	4 - 20mA	AS845-142	AS845-542	
	4 - 20mA	0 - 5VDC	AS845-214	AS845-538	
	0 - 10VDC	0 - 10VDC	AS845-143	AS845-543	
0 - 220VDC	4 - 20mA	0 - 10VDC	AS845-115	AS845-515	
	4 - 20mA	4 - 20mA	AS845-144	AS845-544	
	0 - 10VDC	0 - 10VDC	AS845-145	AS845-545	
0 - 300VDC	4 - 20mA	4 - 20mA	AS845-113	AS845-513	
	4 - 20mA	4 - 20mA	AS845-146	AS845-546	
	4 - 20mA	4 - 20mA	AS845-157	AS845-557	
0 - 20mA	0 - 10VDC	0 - 10VDC	AS845-147	AS845-547	
	4 - 20mA	0 - 10VDC	AS845-116	AS845-516	
	4 - 20mA	4 - 20mA	AS845-148	AS845-548	
4 - 20mA	0 - 10VDC	0 - 10VDC	AS845-149	AS845-549	
	4 - 20mA	0 - 10VDC	<b>AS845-102</b>	AS845-502	
	4 - 20mA	4 - 20mA	<b>AS845-154</b>	AS845-554	
	4 - 20mA	0 - 5VDC	AS845-150	AS845-550	
	0 - 5VDC	0 - 5VDC	AS845-151	AS845-551	
	0 - 20mA	0 - 10VDC	AS845-158	AS845-558	


0 – 1A AC	0 - 10VDC	0 - 10VDC	AS865-101	AS865-501
	4 - 20mA	0 - 10VDC	AS865-102	AS865-502
	4 - 20mA	4 - 20mA	AS865-103	AS865-503
0 – 5A AC	0 - 10VDC	0 - 10VDC	AS865-104	AS865-504
	4 - 20mA	0 - 10VDC	AS865-105	AS865-505
	4 - 20mA	4 - 20mA	AS865-106	AS865-506


Analog Signal Converters HSN : 85437099	Input	Output 1	Output 2	Order Code	
				Aux Supply	
				90 ~ 270V AC	18 ~ 36V DC
Potentiometer / Resistor 1K ~ 10K	0 - 10VDC	0 - 10VDC	AS845-155	AS845-555	
	4 - 20mA	0 - 10VDC	<b>AS845-106</b>	AS845-506	
	4 - 20mA	4 - 20mA	AS845-156	AS845-556	
-200 to +200°C	0 - 10VDC	0 - 10VDC	AS845-159	AS845-559	
	4 - 20mA	0 - 10VDC	AS845-215	AS845-615	
	4 - 20mA	4 - 20mA	AS845-216	AS845-616	
-200 to +200°C	4 - 20mA	4 - 20mA	AS845-217	AS845-617	
	0 - 10VDC	0 - 10VDC	AS845-218	AS845-618	
	4 - 20mA	0 - 10VDC	AS845-219	AS845-619	
0 to 100°C	4 - 20mA	4 - 20mA	AS845-220	AS845-620	
	0 - 10VDC	0 - 10VDC	AS845-221	AS845-621	
	4 - 20mA	0 - 10VDC	AS845-222	AS845-622	
0 to 200°C	4 - 20mA	4 - 20mA	AS845-223	AS845-623	
	0 - 10VDC	0 - 10VDC	AS845-224	AS845-624	
	4 - 20mA	0 - 10VDC	AS845-225	AS845-625	
0 to 250°C	4 - 20mA	4 - 20mA	AS845-226	AS845-626	
	4 - 20mA	0 - 5VDC	AS845-248	AS845-648	
	0 - 10VDC	0 - 10VDC	AS845-227	AS845-627	
0 to 300°C	4 - 20mA	0 - 10VDC	AS845-228	AS845-628	
	4 - 20mA	4 - 20mA	AS845-229	AS845-629	
	0 - 10VDC	0 - 10VDC	AS845-230	AS845-630	
0 to 400°C	4 - 20mA	0 - 10VDC	AS845-231	AS845-631	
	4 - 20mA	4 - 20mA	AS845-232	AS845-632	
	0 - 10VDC	0 - 10VDC	AS845-233	AS845-633	
0 to 500°C	4 - 20mA	0 - 10VDC	AS845-234	AS845-634	
	4 - 20mA	4 - 20mA	AS845-235	AS845-635	
	0 - 10VDC	0 - 10VDC	AS845-236	AS845-636	
0 to 600°C	4 - 20mA	0 - 10VDC	AS845-237	AS845-637	
	4 - 20mA	4 - 20mA	AS845-238	AS845-638	
	0 - 10VDC	0 - 10VDC	AS845-239	AS845-639	
0 to 800°C	4 - 20mA	0 - 10VDC	AS845-240	AS845-640	
	4 - 20mA	4 - 20mA	AS845-241	AS845-641	
	0 - 10VDC	0 - 10VDC	AS845-242	AS845-642	
0 to 1000°C	4 - 20mA	0 - 10VDC	AS845-243	AS845-643	
	4 - 20mA	4 - 20mA	AS845-244	AS845-644	
	0 - 10VDC	0 - 10VDC	AS845-245	AS845-645	
0 to 1200°C	4 - 20mA	0 - 10VDC	AS845-246	AS845-646	
	4 - 20mA	4 - 20mA	AS845-247	AS845-647	
	0 - 10VDC	0 - 10VDC	AS845-251	AS845-651	
0 to 100°C	4 - 20mA	0 - 10VDC	AS845-252	AS845-652	
	4 - 20mA	4 - 20mA	AS845-253	AS845-653	
	0 - 10VDC	0 - 10VDC	AS845-254	AS845-654	
0 to 200°C	4 - 20mA	0 - 10VDC	AS845-255	AS845-655	
	4 - 20mA	4 - 20mA	AS845-256	AS845-656	



**Dual Isolated Output**

0 to 300°C	0 - 10VDC	0 - 10VDC	AS845-257	AS845-657
	4 - 20mA	0 - 10VDC	AS845-258	AS845-658
	4 - 20mA	4 - 20mA	AS845-259	AS845-659
0 to 400°C	0 - 10VDC	0 - 10VDC	AS845-260	AS845-660
	4 - 20mA	0 - 10VDC	AS845-261	AS845-661
	4 - 20mA	4 - 20mA	AS845-262	AS845-662
0 to 500°C	0 - 10VDC	0 - 10VDC	AS845-263	AS845-663
	4 - 20mA	0 - 10VDC	AS845-264	AS845-664
	4 - 20mA	4 - 20mA	AS845-265	AS845-665
0 to 600°C	0 - 10VDC	0 - 10VDC	AS845-266	AS845-666
	4 - 20mA	0 - 10VDC	AS845-267	AS845-667
	4 - 20mA	4 - 20mA	AS845-268	AS845-668
0 to 700°C	0 - 10VDC	0 - 10VDC	AS845-269	AS845-669
	4 - 20mA	0 - 10VDC	AS845-270	AS845-670
	4 - 20mA	4 - 20mA	AS845-271	AS845-671
0 to 800°C	0 - 10VDC	0 - 10VDC	AS845-272	AS845-672
	4 - 20mA	0 - 10VDC	AS845-273	AS845-673
	4 - 20mA	4 - 20mA	AS845-274	AS845-674

<b>Analog Signal Converters</b> <small>HSN : 85437099</small>	Input	Output 1	Output 2	Order Code	
				Aux Supply	
				90 ~ 270V AC	18 ~ 36V DC
 <p><b><u>Dual Isolated Output</u></b></p>	-100 to +100°C	0 - 10VDC	0 - 10VDC	AS845-301	AS845-701
		4 - 20mA	0 - 10VDC	AS845-302	AS845-702
		4 - 20mA	4 - 20mA	AS845-303	AS845-703
	-50 to +200°C	0 - 10VDC	0 - 10VDC	AS845-304	AS845-704
		4 - 20mA	0 - 10VDC	AS845-305	AS845-705
		4 - 20mA	4 - 20mA	AS845-306	AS845-706
	-50 to +50°C	0 - 10VDC	0 - 10VDC	AS845-307	AS845-707
		4 - 20mA	0 - 10VDC	AS845-308	AS845-708
		4 - 20mA	4 - 20mA	AS845-309	AS845-709
	0 to 100°C	0 - 10VDC	0 - 10VDC	AS845-310	AS845-710
		4 - 20mA	0 - 10VDC	AS845-311	AS845-711
		4 - 20mA	4 - 20mA	AS845-312	AS845-712
	0 to 200°C	0 - 10VDC	0 - 10VDC	AS845-313	AS845-713
		4 - 20mA	0 - 10VDC	AS845-314	AS845-714
		4 - 20mA	4 - 20mA	AS845-315	AS845-715
	0 to 300°C	0 - 10VDC	0 - 10VDC	AS845-316	AS845-716
		4 - 20mA	0 - 10VDC	AS845-317	AS845-717
		4 - 20mA	4 - 20mA	AS845-318	AS845-718
	0 to 400°C	0 - 10VDC	0 - 10VDC	AS845-319	AS845-719
		4 - 20mA	0 - 10VDC	AS845-320	AS845-720
		4 - 20mA	4 - 20mA	AS845-321	AS845-721
	0 to 500°C	0 - 10VDC	0 - 10VDC	AS845-322	AS845-722
		4 - 20mA	0 - 10VDC	AS845-323	AS845-723
		4 - 20mA	4 - 20mA	AS845-324	AS845-724
	0 to 600°C	0 - 10VDC	0 - 10VDC	AS845-325	AS845-725
		4 - 20mA	0 - 10VDC	AS845-326	AS845-726
		4 - 20mA	4 - 20mA	AS845-327	AS845-727
	0 to 700°C	0 - 10VDC	0 - 10VDC	AS845-328	AS845-728
		4 - 20mA	0 - 10VDC	AS845-329	AS845-729
		4 - 20mA	4 - 20mA	AS845-330	AS845-730
	0 to 800°C	0 - 10VDC	0 - 10VDC	AS845-331	AS845-731
		4 - 20mA	0 - 10VDC	AS845-332	AS845-732
		4 - 20mA	4 - 20mA	AS845-333	AS845-733

<b>Analog Signal Converters</b> <small>HSN : 85437099</small>	<b>Input</b>	<b>Output</b>	<b>Order Code</b>
 <p><b><u>Single Output Slim</u></b></p> <p><b><u>Size : 22.5mm Aux</u></b></p> <p><b><u>Supply : 24VDC</u></b></p>	0 – 20mV	0 - 10VDC 4 - 20mA	AS746-101 AS746-102
	0 – 75mV	0 - 10VDC 4 - 20mA	AS746-103 AS746-104
	0 – 1VDC	0 - 10VDC 4 - 20mA	AS746-105 AS746-106
	0 – 2VDC	0 - 10VDC 4 - 20mA	AS746-107 AS746-108
	0 – 2.5VDC	0 - 10VDC 4 - 20mA	AS746-109 AS746-110
	0 – 5VDC	0 - 10VDC 4 - 20mA 0 – 5VDC	AS746-111 AS746-112 AS746-121
	-3/0 to +10VDC	-3/0 to +10VDC	AS746-113
	0 - 10VDC	4 - 20mA	AS746-114
	0 – 15VDC	4 - 20mA	AS746-604
	0 – 50VDC	0 - 10VDC	AS746-115
	0 – 100VDC	0 - 10VDC	AS746-117
	0 – 200VDC	0 - 10VDC	AS746-119
	0 - 20mA	0 - 10VDC 4 - 20mA	AS746-151 AS746-152
	4 - 20mA	0 - 10VDC 4 - 20mA	AS746-153 AS746-154
	4 - 20mA	0 - 5VDC	AS746-601

<b>Analog Signal Converters</b> <small>HSN : 85437099</small>	<b>Input</b>	<b>Output</b>	<b>Order Code</b>
	0 to 300°C	0 - 10VDC 4 - 20mA	AS746-201 AS746-202
	0 to 400°C	0 - 10VDC 4 - 20mA	AS746-203 AS746-204
	0 to 500°C	0 - 10VDC 4 - 20mA	AS746-205 AS746-206
	0 to 600°C	0 - 10VDC 4 - 20mA	AS746-207 AS746-208
	0 to 800°C	0 - 10VDC 4 - 20mA	AS746-209 AS746-210
	0 to 1000°C	0 - 10VDC 4 - 20mA	AS746-211 AS746-212
	0 to 1200°C	0 - 10VDC 4 - 20mA	AS746-213 AS746-214
	-200 to +200°C	0 - 10VDC 4 - 20mA	AS746-215 AS746-216
	-100 to +100°C	0 - 10VDC 4 - 20mA	AS746-217 AS746-218
	0 to 100°C	0 - 10VDC 4 - 20mA	AS746-219 AS746-220
	0 to 200°C	0 - 10VDC	AS746-221




**Single Output**

**Slim Size : 22.5mm**


**Aux Supply : 24VDC**

	4 - 20mA	AS746-222
0 to 200°C	0 - 5VDC	AS746-603
0 to 300°C	0 - 10VDC	AS746-226
	4 - 20mA	AS746-227
0 to 500°C	0 - 10VDC	AS746-228
	4 - 20mA	AS746-229
0 to 700°C	0 - 10VDC	AS746-230
	4 - 20mA	AS746-231
0 to 800°C	0 - 10VDC	AS746-232
	4 - 20mA	AS746-233
-100 to +100°C	0 - 10VDC	AS746-301
	4 - 20mA	AS746-302
-50 to +50°C	0 - 10VDC	AS746-303
	4 - 20mA	AS746-304
0 to 100°C	0 - 10VDC	AS746-305
	4 - 20mA	AS746-306
0 to 200°C	0 - 10VDC	AS746-307
	4 - 20mA	AS746-308
0 to 300°C	0 - 10VDC	AS746-309
	4 - 20mA	AS746-310
0 to 400°C	0 - 10VDC	AS746-311
	4 - 20mA	AS746-312
0 to 500°C	0 - 10VDC	AS746-313
	4 - 20mA	AS746-314
0 to 600°C	0 - 10VDC	AS746-315
	4 - 20mA	AS746-316
0 to 700°C	0 - 10VDC	AS746-317
	4 - 20mA	AS746-318
0 to 800°C	0 - 10VDC	AS746-319
	4 - 20mA	AS746-320
-50 to +200°C	0 - 10VDC	AS746-321
	4 - 20mA	AS746-322

<b>Digital Timer</b> HSN : 91070000	<b>Modes</b>	<b>Time Ranges</b>	<b>Output Contact</b>	<b>Supply Voltage</b>	<b>Size (mm)</b>	<b>Order Code</b>				
 <p><b><u>Push Wheel</u></b></p>	<ul style="list-style-type: none"> <li>• On Delay</li> <li>• Interval</li> </ul> Counting : Down	9.99 Sec 99.9 Sec 999 Sec  99.9 Min 999 Min  99.9 Hr (Switch Selectable)	DPDT (2 C/O)	85~270V AC/DC	48x48	TDPW-48-Z				
					72x72	TDPW-72-Z				
					96x96	TDPW-96-Z				
								24V AC/DC	48x48	TDPW-48-24V
									72x72	TDPW-72-24V
									96x96	TDPW-96-24V







 <p><b><u>3 Digit, Single Display</u></b></p>	<ul style="list-style-type: none"> <li>• On Delay</li> <li>• Interval</li> <li>• Cyclic</li> </ul> <p>Counting : Up / Down</p>	9.99 Sec 99.9 Sec 999 Sec 9.59 Min : Sec 99.9 Min 999 Min 9.59 Hr : Min 99.9 Hr 999 Hr (Programmable)	DPDT (2 C/O)	85~270V AC/DC	48x48	TD1D-48-Z
				72x72	TD1D-72-Z	
				96x96	TD1D-96-Z	
				24V AC/DC	48x48	TD1D-48-24V
				72x72	TD1D-72-24V	
				96x96	TD1D-96-24V	
 <p><b><u>3 Digit, Dual Display</u></b></p>	<ul style="list-style-type: none"> <li>• On Delay</li> <li>• Interval</li> <li>• Cyclic</li> <li>• Instantaneous +Delayed</li> </ul> <p>Counting : Up / Down</p>	9.99 Sec 99.9 Sec 999 Sec 9.59 Min : Sec 99.9 Min 999 Min 9.59 Hr : Min 99.9 Hr 999 Hr (Programmable)	2 Nos. SPDT (1 C/O)	85~270V AC/DC	48x48	TD2D-48-Z
				72x72	TD2D-72-Z	
				96x96	TD2D-96-Z	
				24V AC/DC	48x48	TD2D-48-24V
				72x72	TD2D-72-24V	
				96x96	TD2D-96-24V	
 <p><b><u>Multi Function</u></b></p>	<ul style="list-style-type: none"> <li>• On Delay</li> <li>• Interval</li> <li>• Cyclic</li> <li>• Forward-pause-Reverse</li> <li>• Batch Counting</li> <li>• Instantaneous +Delayed</li> <li>• Dual Set Point</li> </ul> <p>Counting : Up / Down</p>	99.99 Sec 999.9 Sec 9999 Sec 99.59 Min : Sec 999.9 Min 9999 Min 99.59 Hr : Min 999.9 Hr 9999 Hr (Programmable)	2 Nos. SPDT (1 C/O)	85~270V AC/DC	72x72	TDMF-72-Z


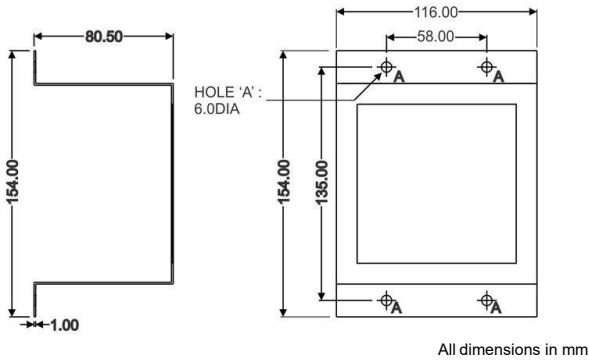

<b>Analog Timer</b> HSN : 91070000	<b>Time Ranges</b>	<b>Output Contact</b>	<b>Supply Voltage</b>	<b>Order Code</b>
 <p><b><u>On Delay / Interval</u></b></p>	0 – 3 Sec / Min 0 – 10 Sec / Min 0 – 30 Sec / Min 0 – 60 Sec / Min (Switch Selectable)	SPDT (1 C/O)	230VAC Or 24V AC / DC	TADU-60M-W
			110VAC Or 24V AC / DC	TADU-60M-X




 <p><b><u>On Delay / Interval</u></b></p>	<p>0 – 3 Sec / Min  0 – 10 Sec / Min  0 – 30 Sec / Min  0 – 60 Sec / Min  (Switch Selectable)</p>	<p>DPDT  (2 C/O)</p>	<p>20 - 240VAC  Or  12 - 240VDC</p>	<p>TADU-60M-U</p>
 <p><b><u>On Delay / Interval</u></b></p>	<p>0 – 1 Sec / Min / Hr  0 – 3 Sec / Min / Hr  0 – 10 Sec / Min / Hr  0 – 30 Sec / Min / Hr  (Switch Selectable)</p>	<p>DPDT  (2 C/O)</p>	<p>20 - 240VAC  Or  12 - 240VDC</p>	<p>TADU-30H-U</p>
 <p><b><u>On Delay</u></b></p>	<p>0 – 30 Sec  ( Factory Set)</p>	<p>SPDT  (1 C/O)</p>	<p>110VAC</p>	<p>TAON-30S-110AC</p>
			<p>230VAC</p>	<p>TAON-30S-230AC</p>
			<p>415VAC</p>	<p>TAON-30S-415AC</p>
	<p>0 – 60 Sec  ( Factory Set)</p>		<p>110VAC</p>	<p>TAON-60S-110AC</p>
			<p>230VAC</p>	<p>TAON-60S-230AC</p>
			<p>415VAC</p>	<p>TAON-60S-415AC</p>
 <p><b><u>Star Delta</u></b></p>	<p>Star Run up time range :  0-30 Sec, 0-60 Sec  ( Switch Selectable)</p> <p>Change over time :  50 msec or 100 msec  ( Switch Selectable)</p>	<p>SPDT  (1 C/O)  each for  Star &amp;  Delta</p>	<p>110VAC</p>	<p>TASD-60S-110AC</p>
			<p>230VAC</p>	<p>TASD-60S-230AC</p>
			<p>415VAC</p>	<p>TASD-60S-415AC</p>
 <p><b><u>Cyclic ON First Or OFF First</u></b></p>	<p><b>ON Time</b>  0 – 1 Sec / Min / Hr  0 – 10 Sec / Min / Hr  ( Switch Selectable)</p> <p><b>OFF Time</b>  0 – 1 Sec / Min / Hr  0 – 10 Sec / Min / Hr  ( Switch Selectable)</p>	<p>DPDT  (2 C/O)</p>	<p>20 - 240VAC  Or  12 - 240VDC</p>	<p>TACY-10H-U</p>
 <p><b><u>True Power OFF</u></b></p>	<p>0 – 60 Sec  ( Factory Set)</p>	<p>DPDT  (2 C/O)</p>	<p>110 – 240VAC/DC</p>	<p>TATP-60S-Z</p>
	<p>0 – 180 Sec  ( Factory Set)</p>			<p>TATP-180S-Z</p>

<b>Hooter</b> <small>HSN : 85311090</small>	<b>Features</b>	<b>Tone</b>	<b>Supply Voltage</b>	<b>Order Code</b>
 <p><b><u>72 x 72mm Standard</u></b></p>	<ul style="list-style-type: none"> <li>• Volume control</li> <li>• Accept Function : Terminals on Back</li> <li>• Audio level 110db</li> </ul>	2	230VAC	H72S-230AC
		2	24VDC	H72S-24DC
		2	110VAC	H72S-110AC
 <p><b><u>96 x 96mm Standard</u></b></p>	<ul style="list-style-type: none"> <li>• Volume control</li> <li>• Accept Function : Terminals on Back</li> <li>• Audio level 110db</li> </ul>	2	230VAC	H92S-230AC
		2	24VDC	H92S-24DC
		2	110VAC	H92S-110AC
 <p><b><u>96 x 96mm Flasher</u></b></p>	<ul style="list-style-type: none"> <li>• LED Flasher</li> <li>• Volume control</li> <li>• Accept Function : PushButton on Front &amp; Terminals on Back</li> <li>• Audio level 110db</li> </ul>	2	230VAC	H92F-230AC
		2	24VDC	H92F-24DC
 <p><b><u>96 x 96mm Flasher Universal Supply</u></b></p>	<ul style="list-style-type: none"> <li>• LED Flasher</li> <li>• Volume control</li> <li>• Accept Function : PushButton on Front &amp; Terminals on Back</li> <li>• Audio level 110db</li> <li>• Universal Supply</li> </ul>	8	20 – 240VAC Or 12 - 240VDC	H98F-U

 <p><b><u>96 x 96mm General Purpose</u></b></p>	<ul style="list-style-type: none"> <li>• Audio level 110db</li> </ul>	2	230VAC	H92G-230AC
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<b>Hooter</b> <small>HSN : 85311090</small>	Features	Tone	Supply Voltage	Order Code
 <p><b><u>96 x 96mm Base Mount</u></b></p>	<ul style="list-style-type: none"> <li>• LED Flasher</li> <li>• Volume control</li> <li>• Accept Function : Push Button on Front &amp; Terminals on Back</li> <li>• Audio level 110db</li> <li>• Universal Supply</li> <li>• Base Mount</li> </ul>	2	230VAC	H92F-230VAC-B
		2	24VDC	H92F-24VDC-B
		2	24VDC	H92S-24VDC-B
	<ul style="list-style-type: none"> <li>• Material : Black Powder Coated MS</li> <li>• For Wall Mounting 96x96mm Hooter</li> </ul> 	8	20 – 240VAC Or 12 - 240VDC	H98F-UB
 <p><b><u>Wall Mount Clamp For 96x96mm Hooter</u></b></p>				FB468

<b>Modbus I/O Modules</b> <small>HSN : 85437099</small>	Description	Model	I/O	Order Code
 <p><b><u>SMART I/O's</u></b></p>	<ul style="list-style-type: none"> <li>• Supports MODBUS RTU Comm. Protocol</li> <li>• On board SMPS works from 90 to 270VAC</li> </ul>	Relay Output Module	Output : 8 Channel, 1 C/O Relays	AS455-101
		Relay Output Module with <i>Socket Mounted</i>	Output : 8 Channel, 1 C/O Relays	AS455-101-S
		Digital Input Module	Input : 8 DI	AS456-101
		Combo Module	Input : 4 DI Output : 4 channel, 1 C/O Relays	AS457-101