## Auxiliary Terminal Board - IC693ACC336

## **Description and Mounting Dimensions**

The IC693ACC336 Auxiliary Terminal Board is used to connect the DSM314 to Analog Servo Axes and auxiliary devices such as Incremental Quadrature Encoders, Strobe detectors and external switches. The board contains one 36 pin connector, labeled **DSM**. A cable IC693CBL324 (1 meter) or IC693CBL325 (3 meters) connects from the **DSM** connector (PL2) to the DSM314 faceplate.

Thirty-eight screw terminals are provided on the Auxiliary Terminal Board for connections to user devices. These screw terminals have the same pin labels as the 36-pin DSM314 faceplate connector. Refer to the table below for detailed connection information.

Table 3-37. 5VDC Terminal Board IC693ACC336 Pin Assignments

5VDC Terminal Board I/O Screw Terminal	DSM314 Faceplate Pin	Circuit Identifier	Circuit Type	Default Circuit Function
4	4	+5V	Encoder Power	+5V Encoder Power
22	22	0V	Signal Ground	(ground for Encoder Power)
5	5	+5V	Encoder Power	+5V Encoder Power
23	23	0V	Signal Ground	(ground for Encoder Power)
15	15	AIN1_P	±10V Analog In /5V Diff In+	High Speed Digital Input
33	33	AIN1_M	±10V Analog In /5V Diff In-	
16	16	AIN2_P	±10V Analog In /5V Diff In+	High Speed Digital Input
34	34	AIN2_M	±10V Analog In /5V Diff In-	
1	1	IN3_P	5V Diff/Single Input+	Axis 1 Strobe 1
19	19	IN3_N	5V Diff Input-	
2	2	IN4_P	5V Diff/Single Input+	Axis 1 Strobe 2
20	20	IN4_N	5V Diff Input-	
3	3	IN5_P	5V Diff/Single Input+	Axis 2 Strobe 1
21	21	IN5_N	5V Diff Input-	
6	6	IN6_P	5V Diff/Single Input+	Axis 2 Strobe 2
24	24	IN6_N	5V Diff Input-	
7	7	IN7_P	5V Diff/Single Input+	Axis 3 Strobe 1
25	25	IN7_N	5V Diff Input-	
8	8	IN8_P	5V Diff/Single Input+	Axis 3 Strobe 2
26	26	IN8_N	5V Diff Input-	
13	13	IN9_P	5V Diff/Single Input+	Axis 4 Strobe 1
31	31	IN9_N	5V Diff Input-	
14	14	IN10_P	5V Diff/Single Input+	Axis 4 Strobe 2
32	32	IN10_N	5V Diff Input-	
9	9	OUT1	5V Single Ended Output	PLC Control (%Q bit offset 25)
27	27	0V	Signal Ground	(ground for OUT1)
10	10	OUT2	5V Single Ended Output	PLC Control (%Q bit offset 41)
28	28	0V	Signal Ground	(ground for OUT2)
11	11	OUT3	5V Single Ended Output	PLC Control (%Q bit offset 57)

5VDC Terminal Board I/O Screw Terminal	DSM314 Faceplate Pin	Circuit Identifier	Circuit Type	Default Circuit Function	
29	29	0V	Signal Ground	(ground for OUT3)	
12	12	OUT4	5V Single Ended Output	PLC Control (%Q bit offset 73)	
30	30	0V	Signal Ground	(ground for OUT4)	
17	17	VOUT_1	±10V Analog Output+	±10V Analog Output 1+	
35	35	VCOM_1_2	Analog Common	Analog Output Common	
18	18	VOUT_2	±10V Analog Output+	±10V Analog Output 2+	
36	36	VCOM_1_2	Analog Common	Analog Output Common	
37	37	FGND	Frame Ground	Frame Ground	
38	38	FGND	Frame Ground	Frame Ground	

The maximum voltage that should be applied to I/O terminals 16-18 and 34-36 is 30 VDC. The maximum voltage for any other input terminal is 5 VDC.

Six 130V MOVs are installed between selected I/O points and the shield (frame ground) for noise suppression. The I/O terminal points so connected are 16, 17, 18, 34, 35, and 36.

The I/O terminals support a wire gauge of 14-28 AWG. Maximum screw torque that may be applied is 5 inch-pounds.

**Note:** Two of the screw terminals are labeled **S** for **Shield**. A short earth ground wire should be connected from one of the **S** terminals directly to a panel earth ground. The cable shields for any shielded cables from user devices should connect to either of the **S** terminals.

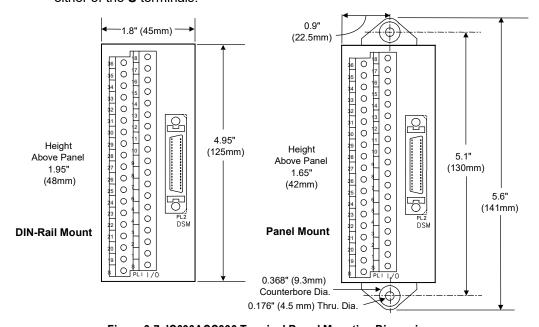


Figure 3-7. IC693ACC336 Terminal Board Mounting Dimensions

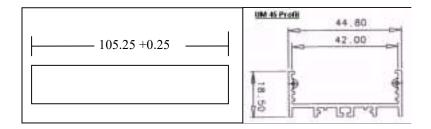
## Converting From DIN-Rail Mounting to Panel Mounting

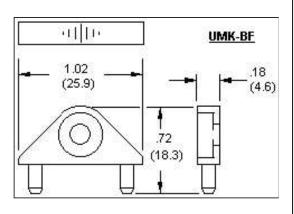
The following parts are used in either the DIN-rail or Panel mount assembly options. The auxiliary terminal board is shipped configured for DIN-rail mounting. The instructions in this section guide you in converting the board to its panel mounting optional configuration.

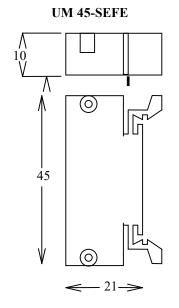
The following table and drawings describe the various plastic parts that make up the auxiliary terminal board assembly and shows a side view of the board configured for DIN-rail mounting.

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Phoenix Contact Part Number	Description	Quantity				
UM45 Profil 105.25	PCB Carrier	1				
UM 45-SEFE with 2 screws	Side element with Foot	2				
UMK 45-SES with 2 screws*	Side Element	2				
UMK-BF*	Mounting Ear	2				
* Parts shipped with auxiliary terminal board for optional panel mounting						

**Table 3-8. Auxiliary Terminal Board Components** 







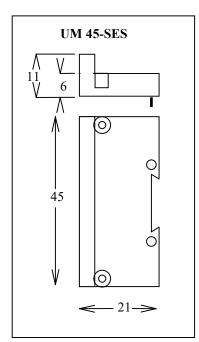


Figure 3-8. Auxiliary Terminal Board Assembly Drawings