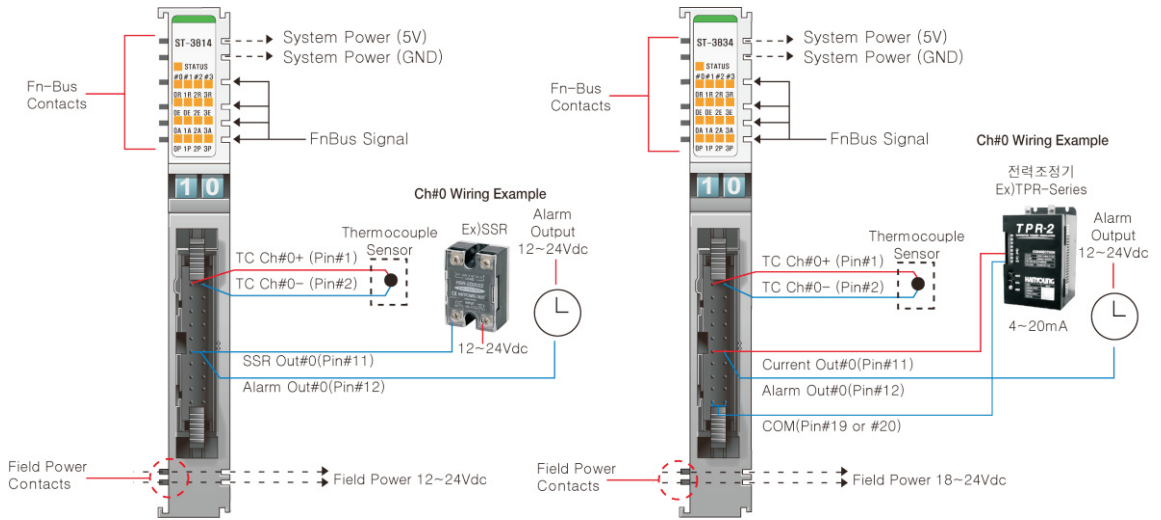


# ST-3814, ST-3834 (Only used the DeviceNet network Adapter NA-9112, NA-9212)

TC, 4 Channels, TEMP. Controller, RTD Input, SSR Output (ST-3814)  
 TC, 4 Channels, TEMP. Controller, RTD Input, Current Output (ST-3834)



Item	ST-3814	ST-3834																																																																																								
<b>Input Specification</b>																																																																																										
Number of Inputs	4 Channels																																																																																									
Indicators	1 Green/Red Fn-Bus state 4 Green LEDs/ch - Ready (R) / - Sensor Error (E) - Alarm Output (A) / - Process Output for SSR (P)	1 Green/Red Fn-Bus state 4 Green LEDs/ch - Ready (R) / - Sensor Error (E) - Alarm Output (A) / - Process Output (P)																																																																																								
Sensor Types	Thermocouple Input / ch / - Type K/J/T/B/R/S/E/N/L/U/C/D TBD																																																																																									
Control Method	P, PI, PD, PID with Auto tuning (Limit Cycle Method), On/Off (PB=0)																																																																																									
Control Output	1 DC-Sink PWM Output for SSR control (11~28.8Vdc) 1 DC-Sink Alarm Output (11~28.8Vdc)	1 Current Output (4~20mA, 12bit Resolution) 1 DC-Sink Alarm Output (18~28.8Vdc)																																																																																								
Cold Junction Compensation	External PT100																																																																																									
Cold Junction Range	-20~100℃																																																																																									
Parameter Setting	NA-9112(DeviceNet), NA-9715(DeviceNet, Serial), NA-9785(Ethernet, Serial), TBD																																																																																									
Proportional Band (PB)	0.0~1000.0℃																																																																																									
Integral Time (Ti)	0~3600sec																																																																																									
Derivative Time (Td)	0~3600sec																																																																																									
Control Cycle (Tc)	1~60sec																																																																																									
Sample Time (Ts)	0.5sec fixed	-																																																																																								
Module Accuracy	±0.3℃ FS@25℃ or 5℃, TBD	-																																																																																								
Thermocouple Accuracy	-	±0.3℃ FS @ Operating Temperature																																																																																								
Current Output Accuracy	-	±1.0℃ FS @ Operating Temperature																																																																																								
Cold Junction Accuracy	-	±0.4ohm @ 25℃ / ±1.5ohm @ 0℃ or 50℃																																																																																								
Etc Functions	ARW, MR, Temp. Offset, Hysteresis (On/Off) TBD																																																																																									
<b>General Specification</b>																																																																																										
Power Dissipation	Max. 200mA@5.0Vdc, TBD																																																																																									
Isolation	I/O to Control Logic : Photocoupler Isolation / DC Module (Included Analog Module) : Terminal Block to F.G 500Vac/1min																																																																																									
Field power	Supply Voltage : 24Vdc Nominal / Voltage Range : 11~28.8Vdc	Supply Voltage : 24Vdc Nominal / Voltage Range : 18~28.8Vdc																																																																																								
Wiring	I/O Cable up to AWG22 / Unit Connector : HIF3BA-20PA-2.54DSA Mate Connector : HIF3C-20D-2.54C, HIF3BA-20D-2.54C / Mate Crimp Pin : HIF3C-2226SCA																																																																																									
Weight	100g, TBD																																																																																									
Module Size	12mm x 99mm x 70mm																																																																																									
Environment Condition	Refer to " Environment Specification"(page : 1-191)																																																																																									
	<table border="1"> <thead> <tr> <th>Pin No.</th> <th>Description</th> <th>Pin No.</th> <th>Description</th> <th>Pin No.</th> <th>Description</th> <th>Pin No.</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>TC Ch#0+</td> <td>2</td> <td>TC Ch#0-</td> <td>1</td> <td>TC Ch#0+</td> <td>2</td> <td>TC Ch#0-</td> </tr> <tr> <td>3</td> <td>TC Ch#1+</td> <td>4</td> <td>TC Ch#1-</td> <td>3</td> <td>TC Ch#1+</td> <td>4</td> <td>TC Ch#1-</td> </tr> <tr> <td>5</td> <td>TC Ch#2+</td> <td>6</td> <td>TC Ch#2-</td> <td>5</td> <td>TC Ch#2+</td> <td>6</td> <td>TC Ch#2-</td> </tr> <tr> <td>7</td> <td>TC Ch#3+</td> <td>8</td> <td>TC Ch#3-</td> <td>7</td> <td>TC Ch#3+</td> <td>8</td> <td>TC Ch#3-</td> </tr> <tr> <td>9</td> <td>Cold Junction Sensor</td> <td>10</td> <td>Cold Junction Sensor</td> <td>9</td> <td>Cold Junction Sensor</td> <td>10</td> <td>Cold Junction Sensor</td> </tr> <tr> <td>11</td> <td>SSR Out Ch#0</td> <td>12</td> <td>Alarm Out Ch#0</td> <td>11</td> <td>Current Out Ch#0</td> <td>12</td> <td>Alarm Out Ch#0</td> </tr> <tr> <td>13</td> <td>SSR Out Ch#1</td> <td>14</td> <td>Alarm Out Ch#1</td> <td>13</td> <td>Current Out Ch#1</td> <td>14</td> <td>Alarm Out Ch#1</td> </tr> <tr> <td>15</td> <td>SSR Out Ch#2</td> <td>16</td> <td>Alarm Out Ch#2</td> <td>15</td> <td>Current Out Ch#2</td> <td>16</td> <td>Alarm Out Ch#2</td> </tr> <tr> <td>17</td> <td>SSR Out Ch#3</td> <td>18</td> <td>Alarm Out Ch#3</td> <td>17</td> <td>Current Out Ch#3</td> <td>18</td> <td>Alarm Out Ch#3</td> </tr> <tr> <td>19</td> <td>COM</td> <td>20</td> <td>COM</td> <td>19</td> <td>COM</td> <td>20</td> <td>COM</td> </tr> </tbody> </table>	Pin No.	Description	Pin No.	Description	Pin No.	Description	Pin No.	Description	1	TC Ch#0+	2	TC Ch#0-	1	TC Ch#0+	2	TC Ch#0-	3	TC Ch#1+	4	TC Ch#1-	3	TC Ch#1+	4	TC Ch#1-	5	TC Ch#2+	6	TC Ch#2-	5	TC Ch#2+	6	TC Ch#2-	7	TC Ch#3+	8	TC Ch#3-	7	TC Ch#3+	8	TC Ch#3-	9	Cold Junction Sensor	10	Cold Junction Sensor	9	Cold Junction Sensor	10	Cold Junction Sensor	11	SSR Out Ch#0	12	Alarm Out Ch#0	11	Current Out Ch#0	12	Alarm Out Ch#0	13	SSR Out Ch#1	14	Alarm Out Ch#1	13	Current Out Ch#1	14	Alarm Out Ch#1	15	SSR Out Ch#2	16	Alarm Out Ch#2	15	Current Out Ch#2	16	Alarm Out Ch#2	17	SSR Out Ch#3	18	Alarm Out Ch#3	17	Current Out Ch#3	18	Alarm Out Ch#3	19	COM	20	COM	19	COM	20	COM	
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13	SSR Out Ch#1	14	Alarm Out Ch#1	13	Current Out Ch#1	14	Alarm Out Ch#1																																																																																			
15	SSR Out Ch#2	16	Alarm Out Ch#2	15	Current Out Ch#2	16	Alarm Out Ch#2																																																																																			
17	SSR Out Ch#3	18	Alarm Out Ch#3	17	Current Out Ch#3	18	Alarm Out Ch#3																																																																																			
19	COM	20	COM	19	COM	20	COM																																																																																			

\* Alarm Output is Sink DC-Output (0.3A/1Output). / \* COM is Field Power (0V) for Current Output and Alarm Output.