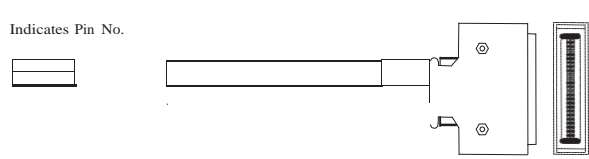
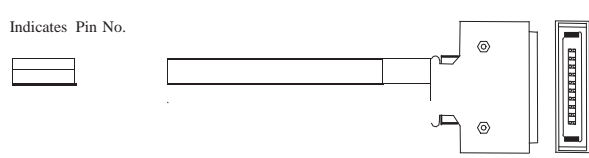
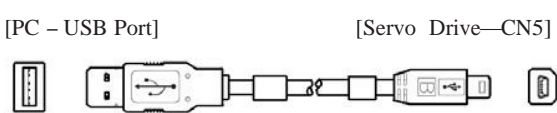


Options and Peripherals

Specifications for Options [Signal Cable]

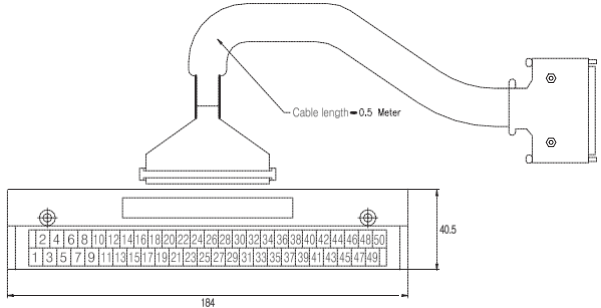
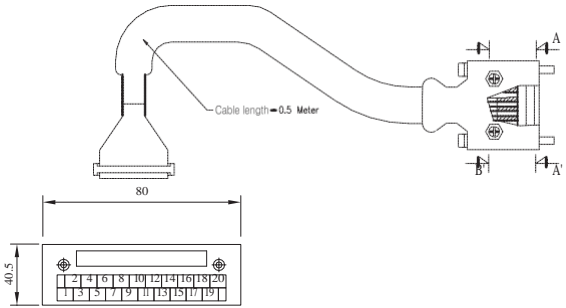
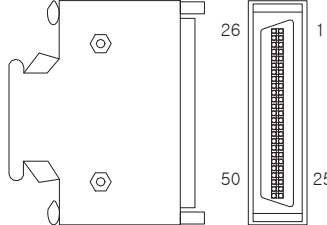
Type	Product Type	Model Name ^(Note1)	Applicable Motor	Specifications																																																																																																													
For Signal	CN1 Cable	APC- CN1□□A	L7S SERIES	<p>[Upper Controller] [Drive Side Connector CN1]</p> <p>Indicates Pin No.</p>  <p>1. Drive Side Connector(CN1) a. Case Spec. : 10350-52A0-008(Made by 3M) b. Connector Spec. : 10150-3000VE(Made by 3M) c. Cable Spec. : 20276-SB 25P(AWG28)</p>																																																																																																													
	<p><Pin No. Display></p> <table border="1"> <thead> <tr> <th>CN1</th> <th>IO Signal</th> <th>CN1</th> <th>IO Signal</th> <th>CN1</th> <th>IO Signal</th> <th>CN1</th> <th>IO Signal</th> <th>CN1</th> <th>IO Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>TRQCOM</td> <td>11</td> <td>PR+</td> <td>21</td> <td>SPD3</td> <td>31</td> <td>/BO</td> <td>41</td> <td>RDY-</td> </tr> <tr> <td>2</td> <td>REFCOM</td> <td>12</td> <td>PR-</td> <td>22</td> <td>SPD2</td> <td>32</td> <td>AO</td> <td>42</td> <td>TLOUT</td> </tr> <tr> <td>3</td> <td>PZO</td> <td>13</td> <td>PCON</td> <td>23</td> <td>SPD1</td> <td>33</td> <td>/AO</td> <td>43</td> <td>ZSPD</td> </tr> <tr> <td>4</td> <td>ZO</td> <td>14</td> <td>GAIN(SEN)</td> <td>24</td> <td>GND</td> <td>34</td> <td>+15V</td> <td>44</td> <td>BRAKE</td> </tr> <tr> <td>5</td> <td>/ZO</td> <td>15</td> <td>PCLEAR</td> <td>25</td> <td>GND</td> <td>35</td> <td>-15V</td> <td>45</td> <td>INSPD/INPOS</td> </tr> <tr> <td>6</td> <td>SRO</td> <td>16</td> <td>TLMT</td> <td>26</td> <td>SETCOM</td> <td>36</td> <td>GND</td> <td>46</td> <td>DIR</td> </tr> <tr> <td>7</td> <td>/SRO</td> <td>17</td> <td>ALMRST</td> <td>27</td> <td>SPDCOM</td> <td>37</td> <td>GND</td> <td>47</td> <td>SVON</td> </tr> <tr> <td>8</td> <td>GND</td> <td>18</td> <td>EMG</td> <td>28</td> <td>MONT1</td> <td>38</td> <td>ALARM+</td> <td>48</td> <td>STOP</td> </tr> <tr> <td>9</td> <td>RF+</td> <td>19</td> <td>CWLM</td> <td>29</td> <td>MONT2</td> <td>39</td> <td>ALARM-</td> <td>49</td> <td>PULCOM</td> </tr> <tr> <td>10</td> <td>PE-</td> <td>20</td> <td>CCWLM</td> <td>30</td> <td>BO</td> <td>40</td> <td>RDY+</td> <td>50</td> <td>+24Vin</td> </tr> </tbody> </table>				CN1	IO Signal	CN1	IO Signal	CN1	IO Signal	CN1	IO Signal	CN1	IO Signal	1	TRQCOM	11	PR+	21	SPD3	31	/BO	41	RDY-	2	REFCOM	12	PR-	22	SPD2	32	AO	42	TLOUT	3	PZO	13	PCON	23	SPD1	33	/AO	43	ZSPD	4	ZO	14	GAIN(SEN)	24	GND	34	+15V	44	BRAKE	5	/ZO	15	PCLEAR	25	GND	35	-15V	45	INSPD/INPOS	6	SRO	16	TLMT	26	SETCOM	36	GND	46	DIR	7	/SRO	17	ALMRST	27	SPDCOM	37	GND	47	SVON	8	GND	18	EMG	28	MONT1	38	ALARM+	48	STOP	9	RF+	19	CWLM	29	MONT2	39	ALARM-	49	PULCOM	10	PE-	20	CCWLM	30	BO	40	RDY+	50
CN1	IO Signal	CN1	IO Signal	CN1	IO Signal	CN1	IO Signal	CN1	IO Signal																																																																																																								
1	TRQCOM	11	PR+	21	SPD3	31	/BO	41	RDY-																																																																																																								
2	REFCOM	12	PR-	22	SPD2	32	AO	42	TLOUT																																																																																																								
3	PZO	13	PCON	23	SPD1	33	/AO	43	ZSPD																																																																																																								
4	ZO	14	GAIN(SEN)	24	GND	34	+15V	44	BRAKE																																																																																																								
5	/ZO	15	PCLEAR	25	GND	35	-15V	45	INSPD/INPOS																																																																																																								
6	SRO	16	TLMT	26	SETCOM	36	GND	46	DIR																																																																																																								
7	/SRO	17	ALMRST	27	SPDCOM	37	GND	47	SVON																																																																																																								
8	GND	18	EMG	28	MONT1	38	ALARM+	48	STOP																																																																																																								
9	RF+	19	CWLM	29	MONT2	39	ALARM-	49	PULCOM																																																																																																								
10	PE-	20	CCWLM	30	BO	40	RDY+	50	+24Vin																																																																																																								
For Signal	CN1 Cable	APCS- CN1□□A	L7N SERIES	<p>[Upper Controller] [Drive Side Connector CN1]</p> <p>Indicates Pin No.</p>  <p>1. Drive Side Connector(CN1) a. Case Spec. : 10320-52A0-008(Made by 3M) b. Connector Spec. : 10120-3000VE(Made by 3M)</p>																																																																																																													
	<p><Pin No. Display></p> <table border="1"> <thead> <tr> <th>NO</th> <th>Signal</th> <th>NO</th> <th>Signal</th> <th>NO</th> <th>Signal</th> <th>NO</th> <th>Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BRAKE+</td> <td>6</td> <td>24V</td> <td>11</td> <td>HOME</td> <td>16</td> <td>Spare Pin</td> </tr> <tr> <td>2</td> <td>BRAKE-</td> <td>7</td> <td>CWL</td> <td>12</td> <td>ALMRST</td> <td>17</td> <td>RDY+</td> </tr> <tr> <td>3</td> <td>ALARM+</td> <td>8</td> <td>CCWL</td> <td>13</td> <td>DH</td> <td>18</td> <td>RDY-</td> </tr> <tr> <td>4</td> <td>ALARM-</td> <td>9</td> <td>PROBE1</td> <td>14</td> <td>D12</td> <td>19</td> <td>DO1+</td> </tr> <tr> <td>5</td> <td>Spare Pin</td> <td>10</td> <td>PROBE2</td> <td>15</td> <td>Spare Pin</td> <td>20</td> <td>DO1-</td> </tr> </tbody> </table>				NO	Signal	NO	Signal	NO	Signal	NO	Signal	1	BRAKE+	6	24V	11	HOME	16	Spare Pin	2	BRAKE-	7	CWL	12	ALMRST	17	RDY+	3	ALARM+	8	CCWL	13	DH	18	RDY-	4	ALARM-	9	PROBE1	14	D12	19	DO1+	5	Spare Pin	10	PROBE2	15	Spare Pin	20	DO1-																																																													
NO	Signal	NO	Signal	NO	Signal	NO	Signal																																																																																																										
1	BRAKE+	6	24V	11	HOME	16	Spare Pin																																																																																																										
2	BRAKE-	7	CWL	12	ALMRST	17	RDY+																																																																																																										
3	ALARM+	8	CCWL	13	DH	18	RDY-																																																																																																										
4	ALARM-	9	PROBE1	14	D12	19	DO1+																																																																																																										
5	Spare Pin	10	PROBE2	15	Spare Pin	20	DO1-																																																																																																										
For Signal	Communication Cable	APCS- CN5L7U	All Models of L7 SERIES	<p>[PC – USB Port] [Servo Drive—CN5]</p>  <p>1. PC Side Connector : USB A Plug 2. Drive Side Connector(CN5) : Mini USB 5P Plug 3. Electric Requirements Spec. : Double shielded, Twisted Pair, EMI-filter attached type (Ex. : KU-AMB518, Made by SANWA)</p>																																																																																																													

Note1) □□ of Model Name indicates the kind and length of cable. And the declaration is as below.

Cable Length(m)	1	2	3	5

Declaration	01	02	03	05
-------------	----	----	----	----

Specifications for Options [Connector]

Type	Product Type	Model Name ^(Note1)	Applicable Motor	Specifications																																																																																																													
T/B	CN1 T/B	APC-VSCN1T -□□	L7S SERIES	 <p>1. Extended CN1 T/B for VS/L7S 2. Available Cable Length : 0.5[m], 1[m], 1.5[m], 2[m], 3[m]</p>																																																																																																													
	<p><Pin No. Display></p> <table border="1"> <thead> <tr> <th>CN1</th> <th>I/O Signal</th> <th>CN1</th> <th>I/O Signal</th> <th>CN1</th> <th>I/O Signal</th> <th>CN1</th> <th>I/O Signal</th> <th>CN1</th> <th>I/O Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>TRQCOM</td> <td>11</td> <td>PR+</td> <td>21</td> <td>SPD3</td> <td>31</td> <td>/BO</td> <td>41</td> <td>RDY-</td> </tr> <tr> <td>2</td> <td>REFCOM</td> <td>12</td> <td>PR-</td> <td>22</td> <td>SPD2</td> <td>32</td> <td>AO</td> <td>42</td> <td>TLOUT</td> </tr> <tr> <td>3</td> <td>PZO</td> <td>13</td> <td>PCON</td> <td>23</td> <td>SPD1</td> <td>33</td> <td>/AO</td> <td>43</td> <td>ZSPD</td> </tr> <tr> <td>4</td> <td>ZO</td> <td>14</td> <td>GAIN2/SEN</td> <td>24</td> <td>GND</td> <td>34</td> <td>+15V</td> <td>44</td> <td>BRAKE</td> </tr> <tr> <td>5</td> <td>/ZO</td> <td>15</td> <td>PCLER</td> <td>25</td> <td>GND</td> <td>35</td> <td>-15V</td> <td>45</td> <td>INSPD/INPOS</td> </tr> <tr> <td>6</td> <td>SRO</td> <td>16</td> <td>TLMT</td> <td>26</td> <td>SETCOM</td> <td>36</td> <td>GND</td> <td>46</td> <td>DIR</td> </tr> <tr> <td>7</td> <td>/SRO</td> <td>17</td> <td>ALMRST</td> <td>27</td> <td>SPDCOM</td> <td>37</td> <td>GND</td> <td>47</td> <td>SVON</td> </tr> <tr> <td>8</td> <td>GND</td> <td>18</td> <td>EMG</td> <td>28</td> <td>MONIT1</td> <td>38</td> <td>ALARM+</td> <td>48</td> <td>STOP</td> </tr> <tr> <td>9</td> <td>RF+</td> <td>19</td> <td>CWLM</td> <td>29</td> <td>MONIT2</td> <td>39</td> <td>ALARM-</td> <td>49</td> <td>PULCOM</td> </tr> <tr> <td>10</td> <td>PF-</td> <td>20</td> <td>CCWLM</td> <td>30</td> <td>BO</td> <td>40</td> <td>RDY+</td> <td>50</td> <td>+24VIn</td> </tr> </tbody> </table>				CN1	I/O Signal	CN1	I/O Signal	CN1	I/O Signal	CN1	I/O Signal	CN1	I/O Signal	1	TRQCOM	11	PR+	21	SPD3	31	/BO	41	RDY-	2	REFCOM	12	PR-	22	SPD2	32	AO	42	TLOUT	3	PZO	13	PCON	23	SPD1	33	/AO	43	ZSPD	4	ZO	14	GAIN2/SEN	24	GND	34	+15V	44	BRAKE	5	/ZO	15	PCLER	25	GND	35	-15V	45	INSPD/INPOS	6	SRO	16	TLMT	26	SETCOM	36	GND	46	DIR	7	/SRO	17	ALMRST	27	SPDCOM	37	GND	47	SVON	8	GND	18	EMG	28	MONIT1	38	ALARM+	48	STOP	9	RF+	19	CWLM	29	MONIT2	39	ALARM-	49	PULCOM	10	PF-	20	CCWLM	30	BO	40	RDY+	50
CN1	I/O Signal	CN1	I/O Signal	CN1	I/O Signal	CN1	I/O Signal	CN1	I/O Signal																																																																																																								
1	TRQCOM	11	PR+	21	SPD3	31	/BO	41	RDY-																																																																																																								
2	REFCOM	12	PR-	22	SPD2	32	AO	42	TLOUT																																																																																																								
3	PZO	13	PCON	23	SPD1	33	/AO	43	ZSPD																																																																																																								
4	ZO	14	GAIN2/SEN	24	GND	34	+15V	44	BRAKE																																																																																																								
5	/ZO	15	PCLER	25	GND	35	-15V	45	INSPD/INPOS																																																																																																								
6	SRO	16	TLMT	26	SETCOM	36	GND	46	DIR																																																																																																								
7	/SRO	17	ALMRST	27	SPDCOM	37	GND	47	SVON																																																																																																								
8	GND	18	EMG	28	MONIT1	38	ALARM+	48	STOP																																																																																																								
9	RF+	19	CWLM	29	MONIT2	39	ALARM-	49	PULCOM																																																																																																								
10	PF-	20	CCWLM	30	BO	40	RDY+	50	+24VIn																																																																																																								
T/B	CN1 T/B	APCS-L7NCN1T -□□	L7N SERIES	 <p>1. Extended CN1 T/B for L7N 2. Available Cable Length : 0.5[m], 1[m], 1.5[m], 2[m]</p>																																																																																																													
	<p><Pin No. Display></p> <table border="1"> <thead> <tr> <th>NO</th> <th>Signal</th> <th>NO</th> <th>Signal</th> <th>NO</th> <th>Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BRAKE+</td> <td>6</td> <td>24V</td> <td>11</td> <td>HOME</td> </tr> <tr> <td>2</td> <td>BRAKE-</td> <td>7</td> <td>CWL</td> <td>12</td> <td>ALMRST</td> </tr> <tr> <td>3</td> <td>ALARM+</td> <td>8</td> <td>CCWL</td> <td>13</td> <td>DI1</td> </tr> <tr> <td>4</td> <td>ALARM-</td> <td>9</td> <td>PROBE1</td> <td>14</td> <td>DI2</td> </tr> <tr> <td>5</td> <td>Spare Pin</td> <td>10</td> <td>PROBE2</td> <td>15</td> <td>Spare Pin</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>16</td> <td>DO1+</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>17</td> <td>RDY+</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>18</td> <td>RDY-</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>19</td> <td>DO1+</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>20</td> <td>DO1-</td> </tr> </tbody> </table>				NO	Signal	NO	Signal	NO	Signal	1	BRAKE+	6	24V	11	HOME	2	BRAKE-	7	CWL	12	ALMRST	3	ALARM+	8	CCWL	13	DI1	4	ALARM-	9	PROBE1	14	DI2	5	Spare Pin	10	PROBE2	15	Spare Pin					16	DO1+					17	RDY+					18	RDY-					19	DO1+					20	DO1-																																											
NO	Signal	NO	Signal	NO	Signal																																																																																																												
1	BRAKE+	6	24V	11	HOME																																																																																																												
2	BRAKE-	7	CWL	12	ALMRST																																																																																																												
3	ALARM+	8	CCWL	13	DI1																																																																																																												
4	ALARM-	9	PROBE1	14	DI2																																																																																																												
5	Spare Pin	10	PROBE2	15	Spare Pin																																																																																																												
				16	DO1+																																																																																																												
				17	RDY+																																																																																																												
				18	RDY-																																																																																																												
				19	DO1+																																																																																																												
				20	DO1-																																																																																																												
CN	CN1 Connector	APC-CN1NNA	L7S SERIES	 <p>1. Case Spec. : 10350-52A0-008(Made by 3M) 2. Connector Spec. : 10150-3000VE(Made by 3M)</p>																																																																																																													

Note1) □□ of Model Name indicates the kind and length of cable. And the declaration is as below.

*APC-VSCN1T

Cable Length(m)	0.5	1	1.5	2	3
Declaration	01	02	03	04	05

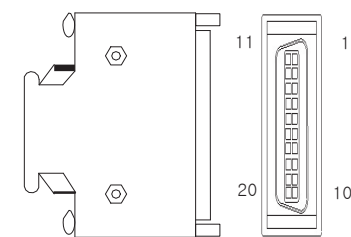
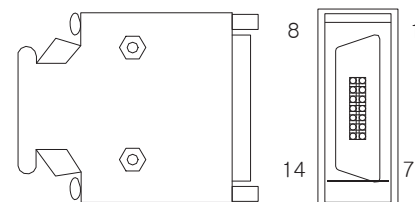
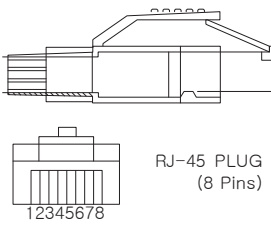
*APCS-L7NCN1T

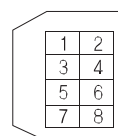
Cable Length(m)	0.5	1	1.5	2
Declaration	01	02	03	04

Declaration	None	03	04	01	02
-------------	------	----	----	----	----

Options and Peripherals

Specifications for Options [Connector]

Type	Product Type	Model Name	Applicable Motor	Specifications																														
CN	CN1 Connector	APC-CN2NNA	L7N SERIES	 <p>1. Case Spec. : 10320-52A0-008(Made by 3M) 2. Connector Spec. : 10120-3000VE(Made by 3M)</p>																														
CN	CN2 Connector	APC-CN3NNA	All Models of L7 SERIES	 <p>1. Case Spec. : 10314-52A0-008(Made by 3M) 2. Connector Spec. : 10114-3000VE(Made by 3M)</p>																														
CN	CN3 CN4 EtherCAT Connector	APCS-CN4NNA	L7N SERIES	 <table border="1" data-bbox="1101 1344 1356 1556"> <thead> <tr> <th>PIN No.</th> <th>Signal</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>TX/RX0 Plus</td> <td>White/Orange</td> </tr> <tr> <td>2</td> <td>TX/RX0 Minus</td> <td>Orange</td> </tr> <tr> <td>3</td> <td>TX/RX1 Plus</td> <td>White/Orange</td> </tr> <tr> <td>4</td> <td>TX/RX2 Plus</td> <td>Blue</td> </tr> <tr> <td>5</td> <td>TX/RX2 Minus</td> <td>White/Blue</td> </tr> <tr> <td>6</td> <td>TX/RX1 Minus</td> <td>Green</td> </tr> <tr> <td>7</td> <td>TX/RX3 Plus</td> <td>White/Brown</td> </tr> <tr> <td>8</td> <td>TX/RX3 Minus</td> <td>Brown</td> </tr> <tr> <td colspan="2">Plate</td> <td>SHLDE</td> </tr> </tbody> </table> <p>RJ-45 PLUG (8 Pins) 12345678</p> <p>Note) EtherCAT use only 4wires(1, 2, 3, 6)</p>	PIN No.	Signal	Color	1	TX/RX0 Plus	White/Orange	2	TX/RX0 Minus	Orange	3	TX/RX1 Plus	White/Orange	4	TX/RX2 Plus	Blue	5	TX/RX2 Minus	White/Blue	6	TX/RX1 Minus	Green	7	TX/RX3 Plus	White/Brown	8	TX/RX3 Minus	Brown	Plate		SHLDE
PIN No.	Signal	Color																																
1	TX/RX0 Plus	White/Orange																																
2	TX/RX0 Minus	Orange																																
3	TX/RX1 Plus	White/Orange																																
4	TX/RX2 Plus	Blue																																
5	TX/RX2 Minus	White/Blue																																
6	TX/RX1 Minus	Green																																
7	TX/RX3 Plus	White/Brown																																
8	TX/RX3 Minus	Brown																																
Plate		SHLDE																																

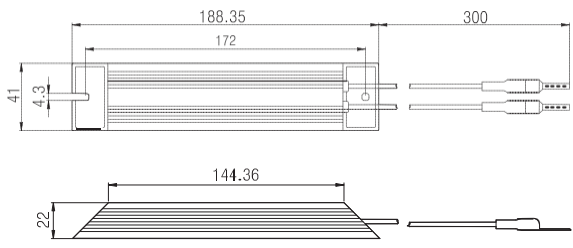
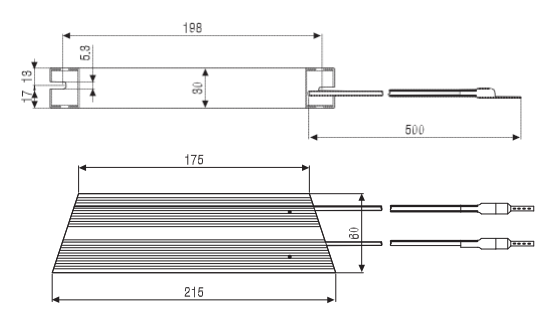
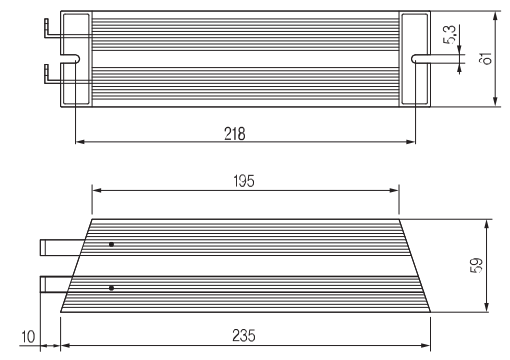


PIN No.	I/O Signal
1	NC
2	NC
3	HWBB1-
4	HWBB1+
5	HWBB2-
6	HWBB2+
7	EDM+
8	EDM-

CN	CN6 Connector	APCS-CN6J	L7N SERIES	1. Spec. : 2040008-1(TE)
----	------------------	-----------	------------	--------------------------

Specifications for Options [Braking Resistor]

*Option braking resistors are selectable items for user's need.

Type	Product Type	Model Name ^(Note1)	Applicable Motor	Specifications
Resistor	Braking Resistor	APCS-140R50	L7□A001□ L7□A002□ L7□A004□	 <p>IRH 140W 50ohm</p>
Resistor	Braking Resistor	APCS-300R30	L7□A008□ L7□A010□	 <p>IRV 300W 30ohm</p>
Resistor	Braking Resistor	APC-600R30	L7□A020□ L7□A035□	 <p>IRV 600S 30ohm IRV 600S 28ohm * L7□A020□ - 2pcs * L7□A050□ - 4pcs (Parallel Connection) (Parallel Connection) L7□A030□ - 3pcs (Parallel Connection)</p> <p>Note) IRV 600S 30ohm and 600S 28ohm have the same external dimensions.</p>
		APC-600R28	L7□A050□ (4P)	

Note1) L7 Series 100W~7.5kW has the internal basic braking resistor. If the machine requires short deceleration time frequently, refer to table above and

apply the appropriate braking resistor.