General Specifications

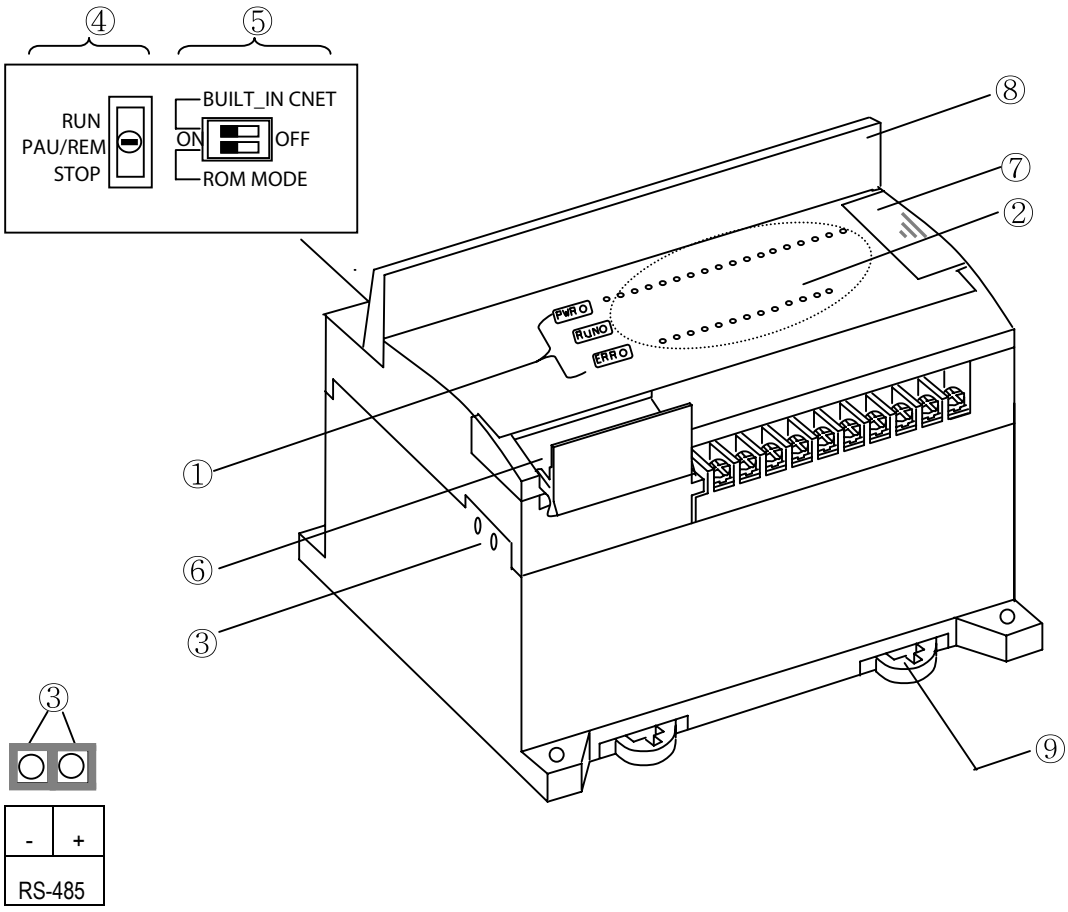
The following table shows the general specifications of the DR.N 1005-8105

<table>
<tr><th>No.</th><th>Item</th><th colspan="6">Specifications</th><th>References</th></tr>
<tr><td>1</td><td>Operating ambient Temperature</td><td colspan="6">0 ~ 55 °C</td><td></td></tr>
<tr><td>2</td><td>Storage ambient Temperature</td><td colspan="6">–25 ~ +70 °C</td><td></td></tr>
<tr><td>3</td><td>Operating ambient Humidity</td><td colspan="6">5 ~ 95%RH, non-condensing</td><td></td></tr>
<tr><td>4</td><td>Storage ambient Humidity</td><td colspan="6">5 ~ 95%RH, non-condensing</td><td></td></tr>
<tr><td rowspan="9">5</td><td rowspan="9">Vibrations</td><td colspan="4">Occasional vibration</td><td>-</td><td></td></tr>
<tr><td>Frequency</td><td colspan="2">Acceleration</td><td>Amplitude</td><td>Sweep count</td><td rowspan="9">IEC 61131-2</td></tr>
<tr><td>10 ≤ f < 57Hz</td><td colspan="2">–</td><td>0.075mm</td><td rowspan="6">10 times for each X, Y, Z axis</td></tr>
<tr><td>57 ≤ f ≤ 150Hz</td><td colspan="2">9.8m/s² {1G}</td><td>–</td></tr>
<tr><td colspan="4">Continuous vibration</td></tr>
<tr><td>Frequency</td><td colspan="2">Acceleration</td><td>Amplitude</td></tr>
<tr><td>10 ≤ f < 57Hz</td><td colspan="2">–</td><td>0.035mm</td></tr>
<tr><td>57 ≤ f ≤ 150Hz</td><td colspan="2">4.9m/s² {0.5G}</td><td>–</td></tr>
<tr><td>6</td><td>Shocks</td><td colspan="6">• Maximum shock acceleration: 147 m/s² {15G}
• Duration time: 11ms
• Pulse wave: half sine pulse (3 shocks per axis, on X, Y, Z axis)</td><td>IEC 61131-2</td></tr>
<tr><td rowspan="5">7</td><td rowspan="5">Noise Immunity</td><td>Square wave Impulse noise</td><td colspan="5">± 1,500 V</td><td>LGIS' Internal Standard</td></tr>
<tr><td>Electronic discharge</td><td colspan="5">Voltage: 4 kV (Discharge by contact)</td><td>IEC 61131-2, IEC 1000-4-2</td></tr>
<tr><td>Radiated electromagnetic field noise</td><td colspan="5">27 ~ 500 MHz, 10 V/m</td><td>IEC 61131-2, IEC 1000-4-3</td></tr>
<tr><td rowspan="2">Fast transient & burst noise</td><td>Item</td><td>Power supply</td><td>Digital I/O (24V and up)</td><td colspan="2">Digital I/O (less than24V) Analog I/O Interface</td><td rowspan="2">IEC 61131-2 IEC 1000-4-4</td></tr>
<tr><td>Voltage</td><td>2kV</td><td>1kV</td><td colspan="2">0.25kV</td></tr>
<tr><td>8</td><td>Atmosphere</td><td colspan="6">Free of corrosive gases and excessive dust</td><td></td></tr>
<tr><td>9</td><td>Altitude</td><td colspan="6">Up to 2,000m</td><td></td></tr>
<tr><td>10</td><td>Pollution degree</td><td colspan="6">2</td><td></td></tr>
<tr><td>11</td><td>Cooling method</td><td colspan="6">Air-cooling</td><td></td></tr>
</table>

REMARK

1) IEC (International Electrotechnical Commission): An international civilian institute who establishes international standards in area of electric and electronics.
2) Pollution degree: An indicator, which indicates pollution degree, which determine insulation performance of equipment.
* Pollution degree 2 : Normally, only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation shall be expected.

Main Unit

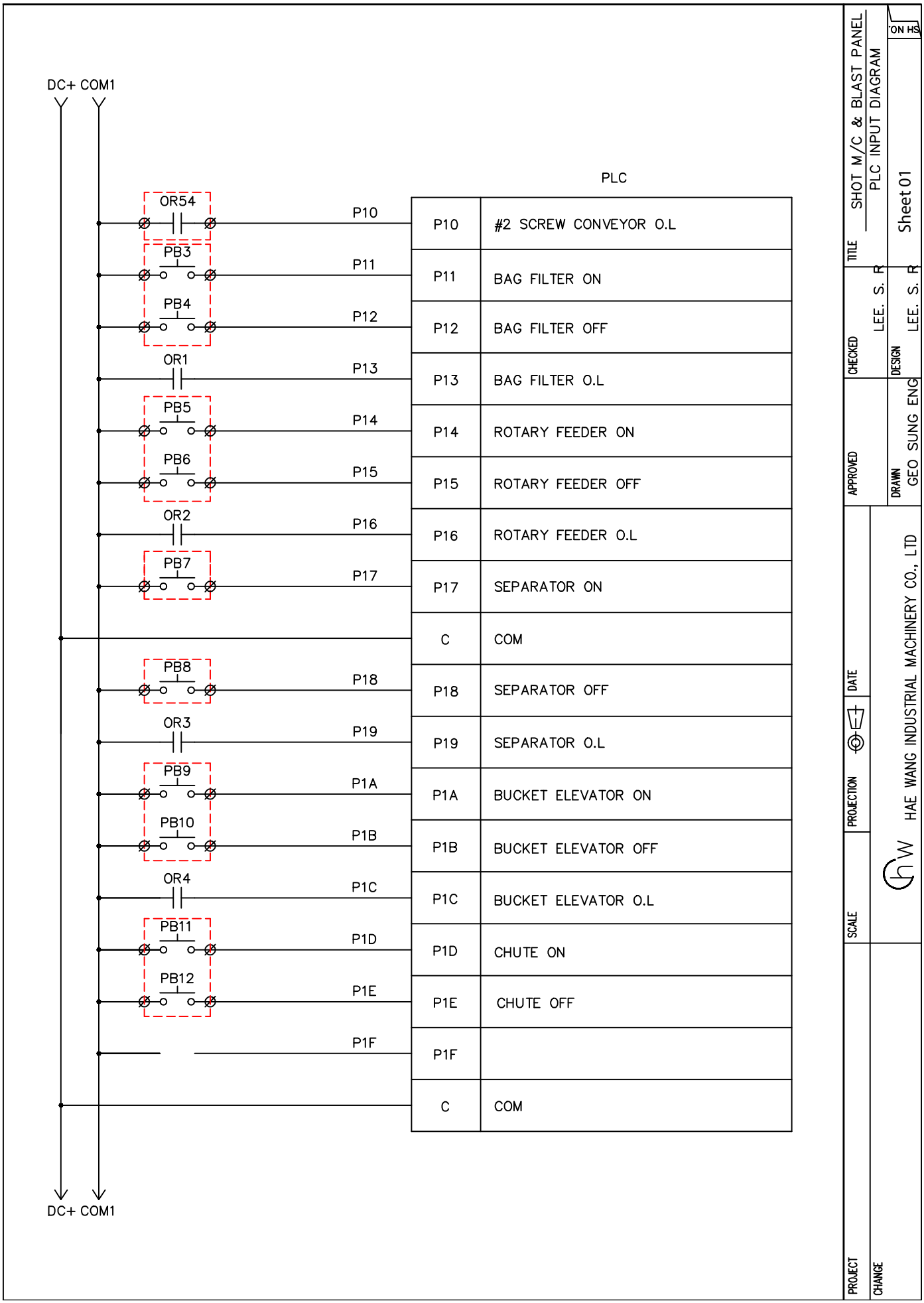


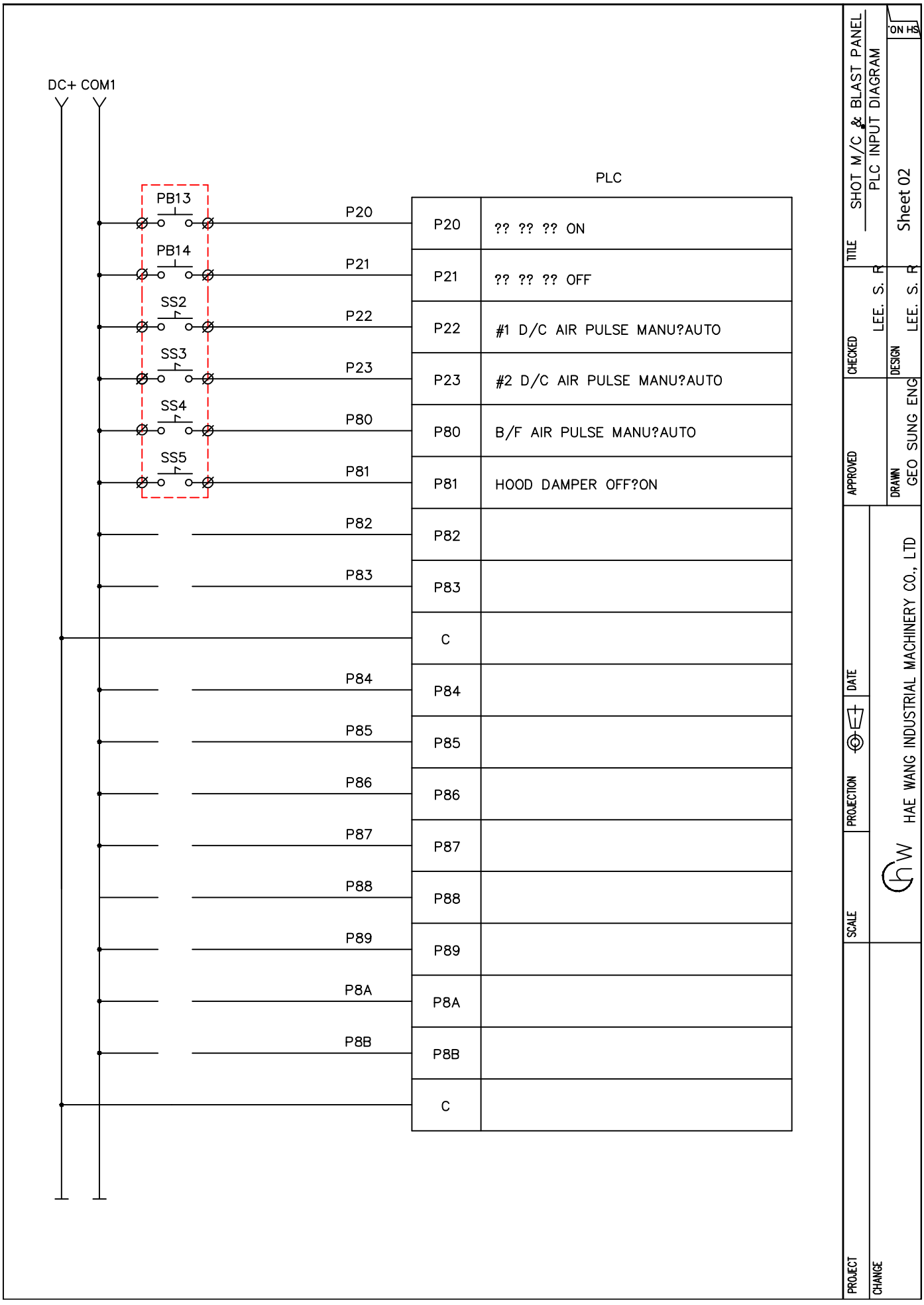
No.	Name		Description
①	CPU Condition LED	PWR LED	Indicates status of power supply to the system • On : When the supplied power is normal • Off : When the supplied power is abnormal
		RUN LED	Indicates operating status of main unit • On : Indicates local key switch or remote running mode • Off : with the followings, LED turns off - When the supplied power to the main unit is abnormal. - While key switch is on stop mode - Detecting an error which makes operation stop
		ERR LED	Indicates operating status of CPU • Flickering : self-inspected error • Off: CPU is working normal.

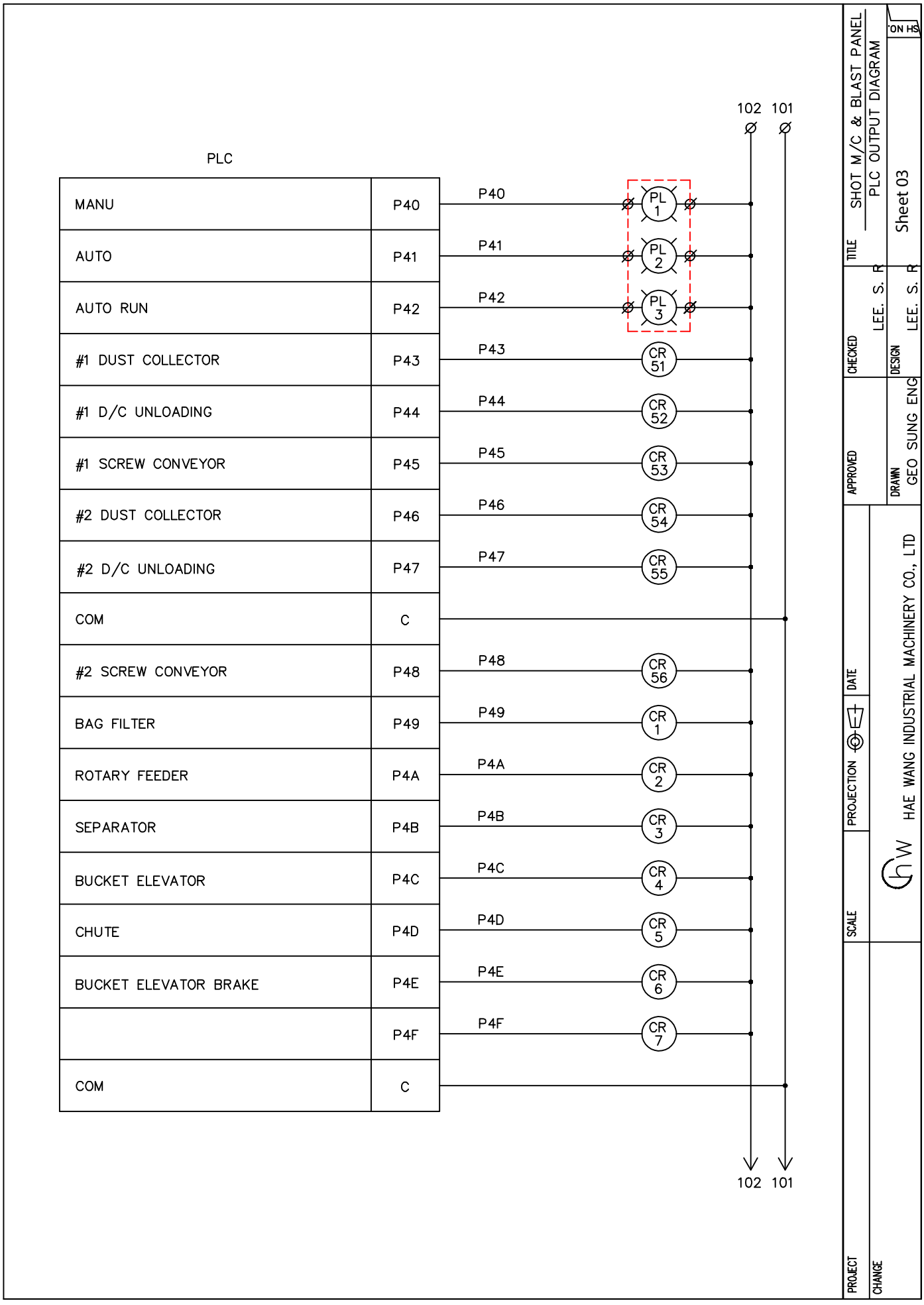
No	Name	Description
②	I/O LED	Indicates operating status of I/O
③	Built-in RS-485 connector (Except K7M-DR10/14UE)	2-pin connector for built-in RS-485 communications.
④	Key switch for mode creation .(Except economic type)	Designates main unit's operation mode • RUN : Run program operation • STOP: Stop program operation • PAU / REM: usage of each modules are as follows: - PAUSE : temporary stopping program operation - REMOTE : designates remote driving
⑤	Dip-switch for Cnet I/F	See Chapter 5.
⑥	RS-232C connector	9-pin DIN connector to connect with external devices like KGLWIN
⑦	Expansion connector cover	Connector cover to connect with expansion unit
⑧	Terminal block cover	Protection cover for wiring of terminal block
⑨	Private hook DIN rail	Private part hook for DIN rail

Layout

DR.N 1005-8105


DC+ COM1
OR54
PB3
PB4
OR1
PB5
PB6
OR2
PB7
PB8
OR3
PB9
PB10
OR4
PB11
PB12
P10
P11
P12
P13
P14
P15
P16
P17
P18
P19
P1A
P1B
P1C
P1D
P1E
P1F
DC+ COM1
PLC
P10 #2 SCREW CONVEYOR O.L
P11 BAG FILTER ON
P12 BAG FILTER OFF
P13 BAG FILTER O.L
P14 ROTARY FEEDER ON
P15 ROTARY FEEDER OFF
P16 ROTARY FEEDER O.L
P17 SEPARATOR ON
C COM
P18 SEPARATOR OFF
P19 SEPARATOR O.L
P1A BUCKET ELEVATOR ON
P1B BUCKET ELEVATOR OFF
P1C BUCKET ELEVATOR O.L
P1D CHUTE ON
P1E CHUTE OFF
P1F
C COM
TITLE SHOT M/C & BLAST PANEL PLC INPUT DIAGRAM
Sheet 01
CHECKED LEE. S. R
DESIGN LEE. S. R
APPROVED
DRAWN GEO SUNG ENG
DATE
PROJECTION
SCALE
HAE WANG INDUSTRIAL MACHINERY CO., LTD
PROJECT
CHANGE


DC+ COM1
PB13
PB14
SS2
SS3
SS4
SS5
P20
P21
P22
P23
P80
P81
P82
P83
C
P84
P85
P86
P87
P88
P89
P8A
P8B
C
PLC
P20 ?? ?? ?? ON
P21 ?? ?? ?? OFF
P22 #1 D/C AIR PULSE MANU?AUTO
P23 #2 D/C AIR PULSE MANU?AUTO
P80 B/F AIR PULSE MANU?AUTO
P81 HOOD DAMPER OFF?ON
P82
P83
C
P84
P85
P86
P87
P88
P89
P8A
P8B
C
TITLE SHOT M/C & BLAST PANEL PLC INPUT DIAGRAM
Sheet 02
ON HS
CHECKED LEE. S. R
DESIGN LEE. S. R
APPROVED
DRAWN GEO SUNG ENG
HAE WANG INDUSTRIAL MACHINERY CO., LTD
DATE
PROJECTION
SCALE
PROJECT
CHANGE


PLC
MANU P40
AUTO P41
AUTO RUN P42
#1 DUST COLLECTOR P43
#1 D/C UNLOADING P44
#1 SCREW CONVEYOR P45
#2 DUST COLLECTOR P46
#2 D/C UNLOADING P47
COM C
#2 SCREW CONVEYOR P48
BAG FILTER P49
ROTARY FEEDER P4A
SEPARATOR P4B
BUCKET ELEVATOR P4C
CHUTE P4D
BUCKET ELEVATOR BRAKE P4E
P4F
COM C
102 101
P40 PL 1
P41 PL 2
P42 PL 3
P43 CR 51
P44 CR 52
P45 CR 53
P46 CR 54
P47 CR 55
P48 CR 56
P49 CR 1
P4A CR 2
P4B CR 3
P4C CR 4
P4D CR 5
P4E CR 6
P4F CR 7
102 101
TITLE SHOT M/C & BLAST PANEL
PLC OUTPUT DIAGRAM
Sheet 03
CHECKED LEE. S. R
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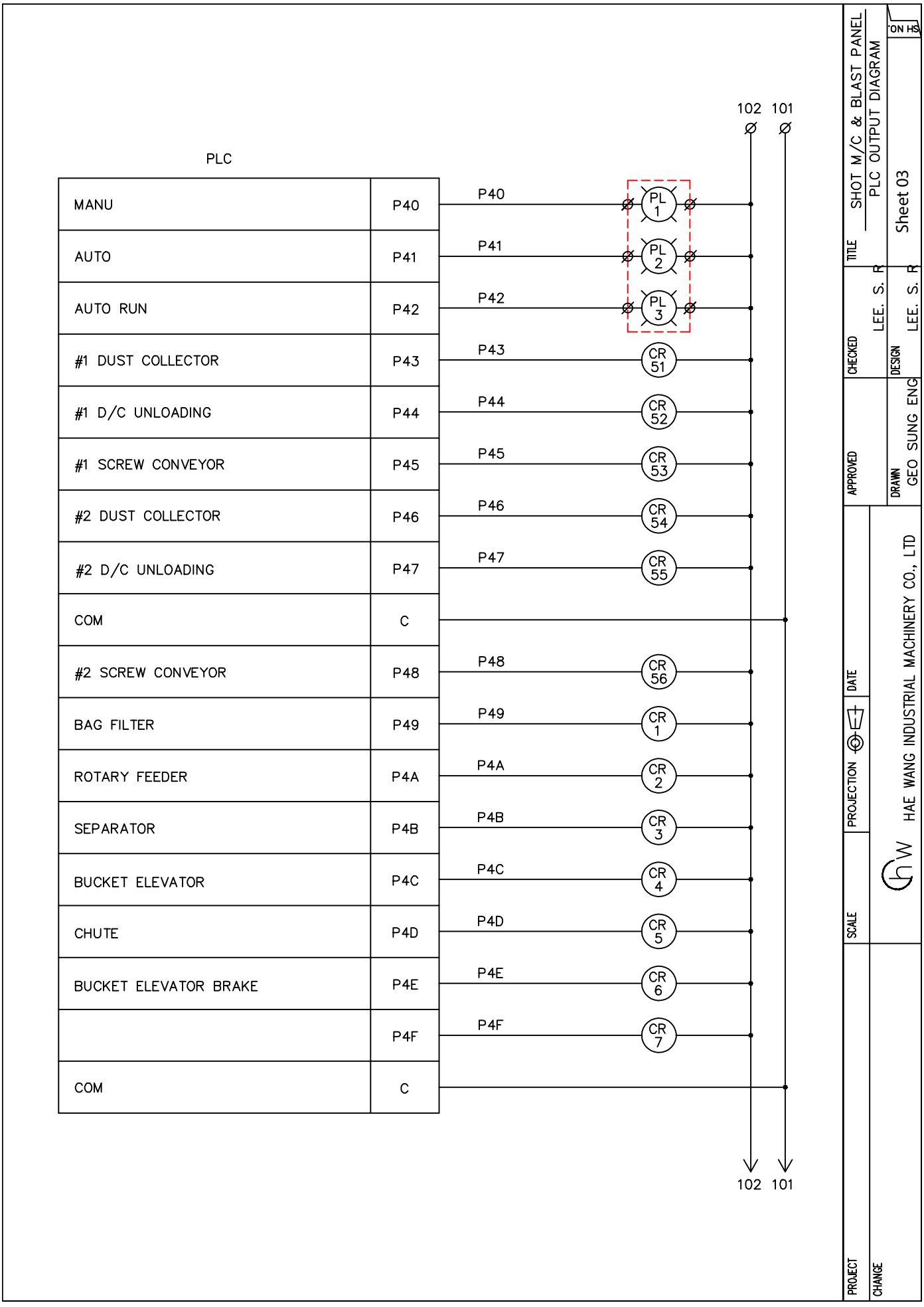
PLC
MANU P40
AUTO P41
AUTO RUN P42
#1 DUST COLLECTOR P43
#1 D/C UNLOADING P44
#1 SCREW CONVEYOR P45
#2 DUST COLLECTOR P46
#2 D/C UNLOADING P47
COM C
#2 SCREW CONVEYOR P48
BAG FILTER P49
ROTARY FEEDER P4A
SEPARATOR P4B
BUCKET ELEVATOR P4C
CHUTE P4D
BUCKET ELEVATOR BRAKE P4E
P4F
COM C
102 101
PL 1
PL 2
PL 3
CR 51
CR 52
CR 53
CR 54
CR 55
CR 56
CR 1
CR 2
CR 3
CR 4
CR 5
CR 6
CR 7
TITLE SHOT M/C & BLAST PANEL PLC OUTPUT DIAGRAM
Sheet 03
CHECKED LEE. S. R
DESIGN LEE. S. R
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HAE WANG INDUSTRIAL MACHINERY CO., LTD
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CHANGE