Exhibit A-1
SOLE SOURCE FACILITY JUSTIFICATION TRANSMITTAL

Public Contract Code section 3400 provides, in pertinent part, that:

"(a) The Legislature finds and declares that it is the intent of this section to encourage contractors and manufacturers to develop and implement new and ingenious materials, products, and services that function as well, in all essential respects, as materials, products, and services that are required by a contract, but at a lower cost to taxpayers.

(b) No agency of the state, nor any political subdivision, municipal corporation, or district, nor any public officer or person charged with the letting of contracts for the construction, alteration, or repair of public works, shall draft or cause to be drafted specifications for bids, in connection with the construction, alteration, or repair of public works, (1) in a manner that limits the bidding, directly or indirectly, to any one specific concern, or (2) calling for a designated material, product, thing, or service by specific brand or trade name unless the specification is followed by the words "or equal" so that bidders may furnish any equal material, product, thing, or service. In applying this section, the specifying agency shall, if aware of an equal product manufactured in this state, name that product in the specification. Specifications shall provide a period of time prior to or after, or prior to and after, the award of the contract for submission of data substantiating a request for a substitution of "an equal" item. If no time period is specified, data may be submitted any time within 35 days after the award of the contract.

(c) Subdivision (b) is not applicable if the awarding authority, or its designee, makes a finding that is described in the invitation for bids or request for proposals that a particular material, product, thing, or service is designated by specific brand or trade name for any of the following purposes:

(2) In order to match other products in use on a particular public improvement either completed or in the course of completion."

Honeywell Spyder Model 5 Room Controllers

This is a sole source procurement because:

- ☐ This is a sole provider of a licensed, copyrighted or patented good or service.
- ☑ This is a sole provider of items compatible with existing equipment or systems.
- ☐ This is a sole provider of factory-authorized warranty service.
- ☑ This is a sole provider of goods or services that perform a unique function in order to meet the specialized needs of the District. Please provide specific detail below.

  Honeywell Spyder Model 5 Room Controllers and related family of unitary controllers provide flexible, free programmable demand led control to benefit the District energy management system. This controller and module provides seamless plug and play integration with the Honeywell JACE 8000 building controller while using the work bench field level software for its diagnostics and programming, the same software which is used with the Tridium IAS and the Honeywell JACE 8000 building controller.

☑ There are overriding circumstances upon which the Board can find that the exception found in Public Contract Code section 3400 (c) (2) applies to the identified product(s). Please provide specific detail below as to what those circumstances are, and why this sole source procurement would be in the best interest of the District.

The District's has maintained a very sophisticated HVAC energy management system over the last 26 years which uses field level controllers to maintain interior building temperatures. The risk factors and challenges stated below present overriding circumstances which would negate the benefit that any competitive bid could offer:

- Risk of comfort control within the campus building
- Lack of quality control as it relates to competitive products
- Potential for system incompatibility and/or failure to integrate with new Tridium Niagara 4 server level software, which has already been sole sourced
- Cost of removal, disassembly and replacement of existing serve and client level software
- Cost of additional training of staff and field level diagnosis equipment

What steps were taken to verify that these goods or services are not available elsewhere?

There are no other comparable room controllers which integrate with the existing building systems design developed by the District's building systems control consultants SC Engineering.

See Supplier and Contractor Information Page Below For Contact Details.

This is a restricted brand or trade name, and no substitutions are allowed because:

☑ The requested product is an integral repair part or accessory compatible with existing equipment or systems.

Existing Equipment/System:	Room Controllers
Manufacturer/Model Number:	Honeywell Spyder Programmable Controller Model 5 WEB-RxxN Room Controllers

☑ The District has standardized on the requested product, and use of another brand/model would require considerable time and funding to evaluate or implement. Please provide additional detail below.

From the advice of the District's building management controls consultant, SC Engineering, the District has standardized on Honeywell Spyder Programmable room controllers.

Supplier or Contractor Information:

Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Customer@honeywell.com
(877) 841-2840

RECOMMENDATION

Sufficient evidence has been provided upon which the Board can find that the exception found in Public Contract Code section 3400 (c) (2) applies to the identified product(s). Approve a finding to authorize use of the above stated exception for Honeywell Spyder Model 5 Room Controllers in the MiraCosta Design Standards Manual for all the projects in the MM program. Require that said finding be included in all pertinent bid/proposal documents for those projects where such product(s) will be used.

SIGNATURE:

Tom Macias, Facilities Director — **Date** 12/23/19

Geoff Bachanas, PMO Director — **Date** 12/18/19

steinberg hart

Exhibit B-1
SOLE SOURCE ARCHITECT/ENGINEERING JUSTIFICATION SUMMARY REPORT TRANSMITTAL

December 20, 2019

Re: Honeywell Room Controllers

Within the Design & Construction Standards MiraCosta CCD has identified or designed various proprietary systems or products that meet specific District performance requirements, allow for seamless integration into existing systems, provide ease of maintenance, and afford a lower total cost of ownership. In these instances, the District is requesting that these systems and products shall be provided without substitution. The following Specification Section 28 09 00 is one that meets these special requirements.

Our experience working with other Colleges and Universities shows that single sources for some materials, products, equipment, and systems is a common approach to achieving best value.

We have reviewed the facility justification transmittal for the above-referenced item and believe that the District's sole-sourcing of this specification section meets the requirements for District's benefit as described above.

Sincerely,

Rob Barthelman
Principal

Spyder Model 5
WEB-RxxN ROOM CONTROLLERS

Honeywell

PRODUCT DATA

Fig. 1. WEB-RxxN (without optional covers)

GENERAL

The Honeywell Spyder Model 5 (WEB-RxxN) family of unitary controllers provide flexible, freely programmable, demand-led control that delivers tangible benefits to reduce energy spends and drives new levels of functionality and efficiency in today's buildings. With scalable and freely programmable BACnet MS/TP-based unitary controllers, smart engineering & commissioning tools, and SYLKbus technology, multiple and flexible configurations can be achieved to address specific applications.

NOTE: When operating Spyder Model 5 controllers in combination with MSTP Supervisor/Controllers, either private (e.g. VPN) networks must be used or protection against the open internet (e.g. with external firewalls) must be ensured. See "Network Security" on pg. 2.

FEATURES

- Designed to control terminal units such as 2- and 4-pipe fan coil units, chilled ceilings, hydronic, indoor air quality, and a mix of these applications.
- For complex applications requiring high I/O count.
- Support for 1-3 stage fans, variable fan speed drives (VSDs), thermal, floating, and proportional actuators.
- Auto-baud rate adaption for BACnet MS/TP communication supported.
- Fast binary I/O points.
- Auto Mac-addressing.
- BACnet BTL®-Listed as Application Specific Controllers (B-ASC) rev 1.14.
- Two housing sizes and several different I/O versions to match your individual needs.
- 24 VAC.
- Universal mounting options, including terminal covers and color-coded terminals.
- Two-wire polarity-insensitive bus interface to connect to Honeywell Sylk wall modules.
- WEB-RL6N and WEB-RS5N have a real-time clock, a supercapacitor for 72-hr and 24-hr data retention respectively.

SYSTEM OVERVIEW

Fig. 2. System overview

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Table 1. Overview of models

	OS no.:	power supply	AOs	UIs	BIs	relays[A]	triacs[B]	total no. of I/Os	remarks
large housing 7-13/16 x 4-5/16 x 2-5/16 (198 x 110 x 57.5 mm)	WEB-RL6N	24 VAC	6	10	0	4	4	24	72-hr data retention
small housing 6-3/8 x 4-5/16 x 2-5/16 (162 x 110 x 57.5 mm)	WEB-RS5N	24 VAC	4	4	0	4	2	14	24-hr data retention

[A] See also section "Relay Current Limitations" on pg. 9.
[B] See also section "Triac Current Limitations" on pg. 9.

CPU: 32-bit MK24FN Freescale Kinetis Cortex M4

⚠ WARNING

Network security

Honeywell hereby expressly states that the Honeywell WEB-RxxN controller is not inherently protected against cyber-attacks from the Internet and that it is therefore intended solely for use in private, protected networks. Unprotected internet connections can expose the Honeywell WEB-RxxN controller to cyber-attacks from third Parties who can then damage it and connected facility components or cause them to malfunction, or who can misuse it for illegal purposes for which the operator may then be held liable.
When directly connected to the Internet, the Honeywell WEB-RxxN controller automatically becomes a potential target for cyber-attacks. Corresponding protective measures are therefore essential if safe and reliable operation is to be ensured.
If it is not necessary for the Honeywell WEB-RxxN controller to be accessible from the Internet, it should be Isolated from the Internet via a suitable firewall.
If it is necessary for the Honeywell WEB-RxxN controller to be accessible from the Internet (e.g. in order to perform remote maintenance), the use of a coded VPN connection is indispensable. Suitable VPN router are available from numerous third-party manufacturers in a wide variety of designs, for operation at 24V.
For details, see also *Spyder Model 5 (MERLIN NX) Networking Whitepaper (Product Literature No. EN2zz-1059GE51).*

DIMENSIONS AND MOUNTING

Housings

The controller is available in two housing sizes, both conforming to IP20:

- WEB-RL6N (large housing): W x L x H = 4-5/16 x 7-13/16 x 2-5/16 (110 x 198 x 59 mm) and
- WEB-RS5N (small housing): W x L x H = 4-5/16 x 6-3/8 x 2-5/16 (110 x 162 x 59 mm)

See also Fig. 3 and Fig. 4.

Fig. 3. WEB-RL6N dimensions in inch (mm)

Fig. 4. WEB-RS5N dimensions in inch (mm)

The unit is suitable for mounting on a standard rail, on walls, as well as in wiring cabinets or fuse boxes.

NOTE: IP20 provides, Ingress Protection against solid objects over 12.5mm e.g. hands, large tools. No protection against liquids.

Terminal Protection Covers for IP30

In the case of controllers mounted outside of a cabinet, before applying power to the device, Terminal Protection Covers (10-pc. bulk packs, order no.: IRM-RLC for WEB-RL6N and IRM-RSC for WEB-RS5N) must be mounted so as to provide IP30.

Fig. 5. Large housing WEB-RL6N, with terminal protection covers, dimensions in inch (mm)

Fig. 6. Small housing WEB-RS5N, with terminal protection covers, dimensions in inch (mm)

NOTE: IP30 provides, Ingress Protection against solid objects over 2.5mm e.g. wire, small tools. No protection against liquids.

TERMINAL ASSIGNMENT

General

For a complete list of all terminals and a description of their functions, see Table 2 on pg.4 and Table 6 on pg.6.

Communication Interfaces

All models of the controller feature the following communication interfaces:

- A Sylk Bus interface for connection to Honeywell TR40x/42x Wall Modules;
- A BACnet MS/TP interface;
- An RJ45 connector for future use with BACnet WiFi Adapter;
- A second RS485 interface for future use with Modbus.

Table 2. WEB-RS5N Room Controller: Overview of terminals and functions

term.	printing	function	WEB-RS5N
1, 2	--	--	--
3, 4	24V~, 24V0	Removable 24 V power supply input and aux. output voltage (24 VAC) for all triacs	--
3, 4	24V~, 24V0	Aux. output voltage (24 VAC) for all triacs	X
5	TN	Aux. term. for triac neutral wiring (internally connected with terminal 8)	X
6	T~	Triac input voltage (24 VAC) for all triacs; triac-switched	X
7	T01	Triac-switched output	X
8	TN	Aux. term. for triac neutral wiring (internally connected with terminal 5)	X
9	T02	Triac-switched output	X
10, 11	RO4, IN4	Output of Relay 4, Input for Relay 4	type 2
12, 13	RN, RN	Aux. terminals for relay neutral wiring	X
14, 15	IN1, RO1	Input for Relay 1, Output of Relay 1	type 1
16, 17	IN2, RO2	Input for Relay 2, Output of Relay 2	type 1
18, 19	IN3, RO3	Input for Relay 3, Output of Relay 3	type 1
20, 21	WM1, WM2	Removable interface for Sylk Bus	X
22, 23, 24, 25	24V~, C2+, C2-, 24V0	Aux. power (24 VAC ±20%, 50/60 Hz), RS485 Modbus interface and corresponding GND	X
26	AO1	Analog Output 1	type 2
27	24V~	24 VAC power for field devices	X
28	GND	Ground for AOs	X
29	AO2	Analog Output 2	type 1
30	AO3	Analog Output 3	type 1
31	24V~	24 VAC power for field devices	X
32	GND	Ground for AOs	X
33	AO4	Analog Output 4	type 1
34	UI1	Universal Input 1	type 1
35	GND	Ground for UIs	X
36	UI2	Universal Input 2	type 1
37	UI3	Universal Input 3	type 1
38	GND	Ground for UIs	X
39	UI4	Universal Input 4	type 1
40, 41, 42	C1+, C1-, GND	Removable BACnet MS/TP interface and corresponding GND	X

Relay output types: See Table 3. Universal input types: See Table 4. Analog output types: See Table 5 pg.5.
-- : Terminal not used.
X : Terminal used/available.
Type x: Type of an I/O as per its characteristic. Mode details given on each type in following tables.

Table 3. Relay output types and characteristics

	type 1 (standard)	type 2 (high in-rush current)
corresponding ROs of WEB-RS5N	RO1, RO2, RO3	RO4
corresponding ROs of WEB-RL6N	RO2, RO3	RO1, RO4
contact	N.O.	N.O.
min. load	5 VAC, 100 mA	24 VAC, 40 mA
switching voltage range	15 - 253 VAC	15 - 253 VAC
max. continuous load at 250 VAC (cos φ = 1)	4 A	10 A
max. continuous load at 250 VAC (cos φ = 0.6)	4 A	10 A
in-rush current (20 ms)	--	80 A
usage	fan motor	fan motor

NOTE: The max. sum load of all relay currents at the same time is 14 A.

Table 4. Universal input types and characteristics

	type 1	type 2	type 3
	UI1, UI2, UI3, UI4, UI5, UI6	UI7, UI8, UI9, UI10	UI1, UI2, UI3, UI4 (RL8N, only)
dry contact (closed: res. <10 kΩ; open: res. > 20 kΩ; max. 0.2 Hz; pull-up voltage: 10 V)	X	X	--
dry contact (closed: res. <10 kΩ; open: res. > 20 kΩ; max. 0.2 Hz; pull-up voltage: 24 V)	--	--	X
fast binary (=counter) input with below characteristics. (max. 30 Hz; pulse ON = min. 16 ms; pulse OFF = min. 16 ms; closed: voltage < 1 V; open: voltage > 5 V; pull-up voltage: 10 V)	X	X	--
fast binary (=counter) input with below characteristics. (max. 30 Hz; pulse ON = min. 16 ms; pulse OFF = min. 16 ms; closed: voltage < 1 V; open: voltage > 5 V; pull-up voltage: 24 V)	--	--	X
0(2) - 10 V	X	X	--
NTC20kΩ	X	--	--
SetPoint and FanSpdSW	X	--	--
NTC10kΩ (Type II)	X	--	--
PT1000 + Ni1000TK5000	--	X	--

Table 5. Analog output types and characteristics

	type 1	type 2	type 3	type 4	type 5
output voltage	0-11 V				
output current	0-1 mA	0-5 mA	0-10 mA	0-20 mA	-1 - +1 mA
min. accuracy	±150 mV				
max. ripple	±100 mV				
accuracy at zero point	0-200 mV				±150 mV

Table 6. WEB-RL6N Room Controllers: Overview of terminals and functions (by model)

term.	printing	function	WEB-RL6N
1, 2	--	--	--
3, 4	24V~, 24V0	Removable 24 V power supply input	X
5, 6	24V~, 24V0	Aux. output voltage (24 VAC) for all triacs	X
7	TN	Aux. terminal for triac neutral wiring (internally connected with terminals 10 and 13)	X
8	T~	Triac input voltage (24 VAC) for all triacs; triac-switched	X
9	T01	Triac-switched output	X
10	TN	Aux. terminal for triac neutral wiring (internally connected with terminals 7 and 13)	X
11	T02	Triac-switched output	X
12	T03	Triac-switched output	X
13	TN	Aux. terminal for triac neutral wiring (internally connected with terminals 7 and 10)	X
14	T04	Triac-switched output	X
15	--	Not used	--
16, 17	RO4, IN4	Output of Relay 4, Input for Relay 4	type 2
18	RN	Aux. terminal for relay neutral wiring	X
19	RN	Aux. terminal for relay neutral wiring	X
20, 21	IN1, RO1	Input for Relay 1, Output of Relay 1	type 2
22, 23	IN2, RO2	Input for Relay 2, Output of Relay 2	type 1
24, 25	IN3, RO3	Input for Relay 3, Output of Relay 3	type 1
26, 27, 28, 29	C2+, C2-, 24V0, 24V~	RS485 Modbus interface, corr. GND, + aux. power (24 VAC ±20%, 50/60 Hz)	X
30, 31	WM1, WM2	Removable interface for Sylk Bus	X
32	AO1	Analog Output 1	type 3
33	GND	Ground for AOs	X
34	AO2	Analog Output 2	type 3
35	24V~	24 VAC power for field devices	X
36	AO3	Analog Output 3	type 1
37	GND	Ground for AOs	X
38	AO4	Analog Output 4	type 1
39	24V~	24 VAC power for field devices	X
40	AO5	Analog Output 5	type 1
41	GND	Ground for AOs	X
42	AO6	Analog Output 6	type 1
43	24V~	24 VAC power for field devices	X
44	24V~	24 VAC power for field devices	--
45	LED	Output to LED of T7460x	--
46	GND	Ground for UIs	X
47	UI1	Universal Input 1	type 1
48	UI2	Universal Input 2	type 1
49	GND	Ground for UIs	X
50	UI3	Universal Input 3	type 1
51	UI4	Universal Input 4	type 1
52	GND	Ground for UIs	X
53	UI5	Universal Input 5	type 1
54	UI6	Universal Input 6	type 1
55	GND	Ground for UIs	X
56	UI7	Universal Input 7	type 2
57	UI8	Universal Input 8	type 2
58	GND	Ground for UIs	X
59	UI9	Universal Input 9	type 2
60	UI10	Universal Input 10	type 2
61	GND	Ground for UIs	X
62, 63, 64	C1+, C1-, GND	Removable BACnet MS/TP interface and corresponding GND	X

Relay output types: See Table 3. Universal input types: See Table 4. Analog output types: See Table 5 on pg.5.
-- : Terminal not used.
X : Terminal used/available.
Type x: Type of an I/O as per its characteristic. Mode details given on each type in the above tables.

Fig. 7. WEB-RS5N (24 VAC models) example wiring

Fig. 8. WEB-RL6N (24 VAC models) example wiring

ELECTRICAL DATA

WEB-RL6N, WEB-RS5N (24 VAC)

Power via terminals 3 and 4: 24 VAC ±20%, 50/60 Hz.

Max. current consumption (when unloaded): 300 mA.

Max. current consumption (when loaded): 900 mA.

A 24 VAC model is "loaded" when – besides the inherent load (300 mA) – an additional sum load resulting from max. **600 mA** is applied to the 24 VAC output terminals. The max. unloaded output voltage at terminals 3 and 4 (WEB-RS5N) or terminals 5 and 6 (WEB-RL6N), respectively, is identical with the output voltage of the external supplying transformer. A maximum 22VA rating transformer is needed when loaded.

FREELY PROGRAMMABLE APPLICATIONS

All models can be used with applications which the application engineer can freely program for each controller. This process is performed on a PC on which the Niagara software program has been installed (see also Table 9 on pg. 10).

Supported Actuators

The application supports a variety of actuators.

- Analog 0(2) - 10 V
- Floating
- PWM
- Staged actuators
- 6-way valve actuators

Supported Sensors

A variety of sensors (e.g., room temperature sensors, supply temperature sensors, condensation switch, window sensors, occupancy sensors, card readers, etc.) may be used to optimize control quality.

Automatic MAC Addressing

In contrast to many other MS/TP controllers, the WEB-RxxN controller features automatic MAC addressing. There is thus no need to manually set the MAC address.

OPERATOR INTERFACES

LEDs

The controller features the following LEDs:

Fig. 9. Controller LEDs

Table 7. Description of LED behaviors

symbol	color	function, description
T2	yellow	Not used
R2	yellow	Not used
T1	yellow	LED indicating transmission of communication signals via the BACnet MS/TP interface
R1	yellow	LED indicating reception of communication signals via the BACnet MS/TP interface.
⚠	yellow	Status LED indicating firmware problems, hardware problems, etc.
⏻	green	Power LED indicating firmware problems, hardware problems, etc.

Service Button

The controller's Service Button is used to trigger dedicated events.

COMMUNICATION INTERFACES

BACnet MS/TP Interface

The controller features an RS485 interface (WEB-RL6N: terminals 62, 63, and 64; WEB-RS5N: terminals 40, 41, and 42) suitable for BACnet MS/TP communication. The terminal block containing it is black. The cable length affects the baud rate. See Table 8.

Table 8. Baud rate vs. max. cable length

baud rate	max. cable length (L)
9.6, 19.2, **38.4**, 57.6, and 76.8 kbps	3600 ft (1200 m)

The controller supports auto-baud rate adaption for BACnet MS/TP communication at all of the aforementioned baud rates (the default is: 38.4 kbps).

For information on wire gauge, max. permissible cable length, possible shielding and grounding requirements, and the max. number of devices which can be connected to a bus, refer to standard EIA-485.

Wall Modules

The TR40x / TR42x / CLCMx Wall Modules can be used in conjunction with the controller to perform room temperature sensing, setpoint adjustment, fan speed manual override, and occupancy override. The wall modules supported by the WEB-RS5N and WEB-RL6N are; TR40, TR40-H, TR40-CO2, TR40-H-CO2, TR42-H, TR42-CO2, TR42_H_CO2, CLCM1T, CLCM2T, CLCM4T, CLCM5T, CLCM6T.

I/O TERMINALS

⚠ CAUTION

Failure to observe the following max. permissible current outputs of the power output terminals will result in damage to the device.

Max. Current Output of Power Output Terminals of 24 VAC Controllers

The 24 VAC power output terminals of the 24 VAC WEB-RL6N controllers are terminals 5, 6, 35, 39, 43, and 44 plus pin 4 of the controller's RJ45 interface.

The 24 VAC power output terminals of the 24 VAC WEB-RS5N controllers are terminals 3, 4, 22, 23, 24, 25, 27, and 31 plus pin 4 of the controller's RJ45 interface.

The maximum permissible combined current output of these 24 VAC power output terminals is 300 mA.

Relay Outputs

⚠ CAUTION

Mixing of different voltages within the relay block is not allowed.

The terminal blocks containing the controller's relay outputs are orange. Relay output types: See Table 3.

NOTE: If inductive components are to be connected to the relays and if these relays switch more often than once every two minutes, these components must be prevented from causing harmful interference to radio or television reception (conformance with EN 45014).

Relay Current Limitations

If the triacs are supplied with current from an external source, then a maximum of two relays may be loaded with a max. of 4 A per relay, even if two triacs are each simultaneously loaded with max. 300 mA.

If the triacs are supplied with current from an internal source, a maximum of two relays may be loaded as follows: a max. load of 4 A for a relay serving a fan and a max. load of 10 A for a relay serving a reheat, even if one triac is simultaneously loaded with 300 mA.

Triac Outputs

NOTE: Recommended fuse (F1): 1.25 A time-lag fuse (IEC). User must consider the correct voltage and max. breaking capacity / interrupting rate (line voltage urgently requires high breaking capacity / interrupting rate).

The terminal blocks containing the controller's triac outputs are orange.

These triac outputs can be used for a variety of different functions, e.g., for connection to either a floating drive or to a thermal actuator. Once the triac outputs have been programmed, the corresponding devices can then be connected to them directly.

NOTE: The VC6983 actuator is intended for use at relay outputs, only and must not be used at the controller's triac outputs.

Triac Current Limitations

The max. allowed current with which the ensemble of a controller's triacs may be loaded is dependent upon whether the given model is powered with 24 VAC, upon whether the outputs are supplied by the controller's internal transformer or by an external current supply). Specifically:

- In the case of 24 VAC models, the ensemble of a controller's triacs may be loaded with 600 mA.

However, regardless of whether the triacs are supplied internally or externally, a single triac must never be loaded with a current of more than 300 mA (320 mA for max. 2 minutes).

Nevertheless, the ensemble of triacs can be loaded for very short periods of time (on the order of milliseconds) with a current on the order of 2500 mA typically encountered when switching on multiple thermal actuators.

Universal Inputs

The terminal blocks containing the controller's universal inputs are blue. Universal input types: See Table 4.

The universal inputs are protected against voltages of max. 29 VAC and 30 VDC (due to, e.g., miswiring).

Bias Resistors

Each universal input is equipped with one bias resistor.

Analog Outputs

The terminal blocks containing the controller's analog outputs are green. Analog output types: See Table 5.

The analog outputs of the WEB-RL6N controllers (large housing) are protected against voltages of max. 29 VAC and 30 VDC (due to, e.g., miswiring).

NOTE: Connecting 24 VAC to any analog output of the WEB-RS5N controller (small housing) will damage the hardware.

TROUBLESHOOTING

All units feature a Status LED, Power LED, and Service Button for commissioning and troubleshooting. See also sections "LEDs", and "Service Button".

Check if the Status LED's behavior is changed if you switch the power OFF/ON. Please contact Honeywell if this does not solve the problem.

ACCESSORIES

Terminal Protection Cover

Required for wall mounting. Bulk pack set of ten covers.

- For LARGE controllers, order no.: **IRM-RLC**
- For SMALL controller, order no.: **IRM-RSC**

APPROVALS, CERTIFICATIONS, AND STANDARDS

Approvals and Certifications

- UL 60730-1, Standard for Automatic Electric Controls for Household and Similar Use, Part 1: General Requirements;
- CAN/CSA-E60730-1:02, Standard for Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements;
- Complementary listing for UL916, CSA C22.2 No. 205;
- BTL-listed, BACnet B-ASC profile;
- SASO-approved;
- CE-approved;
- FCC part 15B-compliant;
- RoHS Conformity.

Classification according to EN 60730-1

EN 60730 sub part:	EN 60730-2-9
Environmental conditions:	For use in home (residential, commercial, and light-industrial) environments
Construction:	Independently mounted electronic control unit with fixed wiring; panel-mounted on DIN rail
Action:	type 1.C
Rated impulse voltage:	24 V circuits: 500 V
Pollution degree:	2
Protection against shock:	Class 0 (without terminal cover) Class II (with terminal cover)
Software class:	A

Classification according to EN 60529

(Degree of protection provided by enclosures)

IP20. In the case of controllers mounted outside of a cabinet, before applying power to the device, Terminal Protection Covers (10-pc. bulk packs, order no.: IRM-RLC for large housings and IRM-RSC for small housings) must be mounted so as to provide IP30.

Ambient Environmental Limits

24V Models (5-95% r.H., non-condensing)

Operating temperature:	+32 to +122 °F (0 to +50 °C)
Storage temperature:	-4 to +158 °F (-20 to +70 °C)

RELATED TECHNICAL LITERATURE

Table 9. Related Technical Literature

Title	Product Lit. no.
Spyder Model 5 Mounting Instructions	31-00276ES
Spyder Model 5 Installation Guide	31-00281ES
Spyder Model 5 User Guide	31-00282ES

Trademark Information

BACnet™ is a trademark of ASHRAE Inc.

Manufactured for and on behalf of the BMS Division of Honeywell Products and Solutions SARL, Z.A. La Pièce, 16, 1180 Rolle, Switzerland by its Authorized Representative:

Honeywell Building Technologies
Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422
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