ADDENDA

ANSI/ASHRAE Addendum c to
ANSI/ASHRAE Standard 205-2023

Representation of Performance Data for HVAC&R and Other Facility Equipment

Approved by ASHRAE and the American National Standards Institute on February 29, 2024.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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SPECIAL NOTE

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The Senior Manager of Standards of ASHRAE should be contacted for

a. interpretation of the contents of this Standard,
b. participation in the next review of the Standard,
c. offering constructive criticism for improving the Standard, or
d. permission to reprint portions of the Standard.

(This foreword is not part of this addendum. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process.)

Foreword to Addendum *c*

Addendum c to Standard 205-2023 adds support for scalable representations of equipment performance–that is, representations that provide performance data for a range of capacities. This capability is needed for at least two use cases:

- *Simulation of typical equipment during early design (when specific equipment has not yet been selected); and*
- *Simulation of generic equipment in compliance situations.*

The addendum specifies that extensive properties such as capacity and input power be allowed to scale (that is, be multiplied by a factor) so equipment is sized appropriately relative to operating load. The permitted extent of scaling is specified in the representation, so data for specific pieces of equipment can be provided with fixed properties.

[***Note***: This addendum makes changes to the current standard indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the instructions specifically describe some other means of showing the changes.]

Addendum c to Standard 205-2023

Table 5-1 revised as follows:

Table 5–1 Data Element Attributes

Attribute	Description	Notes
Name	Public name of data element	See Section 7.3
Description	Text description that defines the meaning of the data element	
Data Type	Data type of data element	See Section 5.3
Units	Units of data element	See Section 5.4
Constraints	A list of constraints on the data element value that can be verified against the schema	See Section 5.5
Required (abbreviated as Req)	Indicates whether data element is mandatory when containing data group is present in a representation	See Section 5.6

Scalable	Indicates whether the data element value is scalable within the limits specified in a Scaling data group	See Section 5.7
Notes	Any supplementary information	

Section 5.7 added as follows:

5.7 Scalable Data Elements. The "Scalable" data element attribute is used to indicate whether a data element value can be scaled by the application software using the information in the Scaling Data Group (see Table 5-14) in the representation's performance data. A data element whose value is scalable shall be denoted with a checkmark "✓". If the data element value shall not be scaled, the "Scalable" data element attribute shall be left blank.

Section 5.8.2 revised as follows:

5.8.2 Reusable Data Groups. The following data groups are defined here and shall be used in any representation specification where applicable to avoid independent implementations of similar data structures.

Informative note 1: These data groups may be used as many times as necessary, even within a single representation specification.

Informative note 2: Additional reusable data groups will be added as necessary when new representation specifications are defined.

[…]

Table 5–14 Scaling

Name	Description	Data Type	Units	Constraints	Req	Notes
minimum	Minimum scaling factor	Numeric	-	>0, <=1.0		If not specified, may be scaled down to any value greater than zero
maximum	Maximum scaling factor	Numeric	-	>=1.0		If not specified, unlimited

Informative note: Each Representation Specification may include a "scaling" data element (of type "{Scaling}") in its "Performance" data group. If it is not present, scaling is not allowed. If it is present, scaling is allowed within the range it specifies. If it is specified, but neither minimum nor maximum are defined (i.e., the data element is empty), unlimited scaling is allowed.

Section 6.4.1.4 revised as follows:

6.4.1 Common Verification Rules. The following verification rules shall be performed on all representations. As common verification rules, the rules listed below shall not be repeated in representation specifications.

[…]

6.4.1.4 Scalability Consistency Check. A representation and all embedded representations shall have consistent scaling factors in their "scaling" data elements.

Section 6.6 revised as follows:

6.6 Application Rules. This section shall provide instructions and advice for application developers to use the data included in representations.

Informative note: Any information that makes it easier for the application developer in consuming the data (e.g., modeling assumptions and/or extrapolation methods) can be included in this section.

6.6.1 Common Application Rules. The following application rules apply to all representations and shall not be repeated in representation specifications.

6.6.1.1 Scalability Rules.

6.6.1.1.1 When scaling is applied by application software, the values of all scalable data elements within a representation must be scaled proportionally using a single scalar.

6.6.1.1.2 An informative message shall be provided to the user indicating when the performance data from a representation is scaled.

Section RS0001.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0001.1 Identification and History. `schema`: RS0001

`schema_version`	Date	Initial Approved Standard	Notes
1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0001-11 revised as follows:

Table RS0001–11 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes

`evaporator_liquid_type`	Type of liquid in evaporator	`{LiquidMixture}`			✓		• `LiquidMixture` specifies liquid constituents and their concentrations • Density shall be evaluated at the evaporator inlet liquid temperature
`condenser_liquid_type`	Type of liquid in condenser	`{LiquidMixture}`			✓		• `LiquidMixture` specifies liquid constituents and their concentrations • Density shall be evaluated at the condenser inlet liquid temperature
`evaporator_fouling_factor`	Factor of heat transfer inhibition due to heat exchanger fouling layer	`Numeric`	$m^2 \cdot K/W$	`≥0.0`	✓		• Evaporator fouling factor at which the performance map was created • May be different from the certification data supplied
`condenser_fouling_factor`	Factor of heat transfer inhibition due to heat exchanger fouling layer	`Numeric`	$m^2 \cdot K/W$	`≥0.0`	✓		• Condenser fouling factor at which the performance map was created • May be different from the certification data supplied
`compressor_speed_control_type`	Type of compressor speed control	`<SpeedControlType>`			✓		
`maximum_power`	Maximum input power at which the chiller operates reliably and continuously	`Numeric`	W	`≥0.0`		✓	
`cycling_degradation_coefficient`	Cycling degradation coefficient (C_D) as described in AHRI 550/590 or AHRI 551/591	`Numeric`	-	`≥0.0, ≤1.0`	✓		Used when the unit cycles to meet a setpoint

scaling	Specifies the range the performance data can be scaled to represent different capacity equipment	{Scaling}					If not present, scaling of the performance data is not allowed
performance_map_cooling	Data group describing cooling performance over a range of conditions	{PerformanceMapCooling}			✓		
performance_map_standby	Data group describing standby performance	{PerformanceMapStandby}			✓		

Table RS0001-13 revised as follows:

Table RS0001–13 GridVariable

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
evaporator_liquid_volumetric_flow_rate	Chilled liquid (evaporator) flow	[Numeric][1..]	m^3/s	>0.0	✓	✓	
evaporator_liquid_leaving_temperature	Leaving evaporator liquid temperature	[Numeric][1..]	K	>0.0	✓		
condenser_liquid_volumetric_flow_rate	Condenser liquid flow	[Numeric][1..]	m^3/s	>0.0	✓	✓	
condenser_liquid_entering_temperature	Entering condenser liquid temperature	[Numeric][1..]	K	>0.0	✓		
compressor_sequence_number	Index indicating the relative capacity order of the compressor speed/stage expressed in order from lowest capacity (starting at 1) to highest capacity	[Integer][1..]	-	≥0	✓		• If compressor_speed_control_type is DISCRETE, sequence numbers shall be provided for each discrete stage of the compressor(s) • If compressor_speed_control_type is CONTINUOUS, sufficient sequence numbers shall be provided to capture the continuous operation of the compressor(s)

Table RS0001-14 revised as follows:

Table RS0001–14 LookupVariablesCooling

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
input_power	Total power input	[Numeric/Null][1..]	W	>0.0	✓	✓	All power consumed by the chiller, including controls, motors, variable speed drive, purge units, sump heater, fans, etc.
net_evaporator_capacity	Refrigeration capacity	[Numeric/Null][1..]	W	≥0.0	✓	✓	The available cooling capacity of the evaporator to the thermal load calculated using only the sensible heat transfer
net_condenser_capacity	Condenser heat rejection	[Numeric/Null][1..]	W	≥0.0	✓	✓	The capacity of the condenser transferred to the condenser cooling stream using only the sensible heat transfer
evaporator_liquid_entering_temperature	Entering evaporator liquid temperature	[Numeric/Null][1..]	K	>0.0	✓		
condenser_liquid_leaving_temperature	Leaving condenser liquid temperature	[Numeric/Null][1..]	K	>0.0	✓		
evaporator_liquid_differential_pressure	Pressure difference across the evaporator	[Numeric/Null][1..]	Pa	>0.0	✓		
condenser_liquid_differential_pressure	Pressure difference across the condenser	[Numeric/Null][1..]	Pa	>0.0	✓		
oil_cooler_heat	Heat transferred to another liquid crossing the control volume boundary from the chiller oil cooler.	[Numeric/Null][1..]	W	≥0.0	✓	✓	Set as 0 if not present or if heat rejection is met by condenser
auxiliary_heat	Heat transferred to another liquid crossing the control volume boundary from the chiller auxiliaries (motor, motor controller, inverter drive, starter, etc).	[Numeric/Null][1..]	W	≥0.0	✓	✓	Set as 0 if not present or if heat rejection is met by condenser

Table RS0001-17 revised as follows:

Table RS0001–17 LookupVariablesStandby

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
input_power	Total power consumed in standby operation	[Numeric/Null][1..]	W	>0.0	✓	✓	• Includes devices that cycle on and off (e.g., purge units and sump units) and devices that draw continuous power (e.g., fans and controls) • Expressed as a time averaged power consumption

Section RS0002.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0002.1 Identification and History. schema: RS0002

schema_version	Date	Initial Approved Standard	Notes
1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0002-14 revised as follows:

Table RS0002–14 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
standby_power	Continuous unit power draw regardless of fan or DX system operation	Numeric	W	≥0.0	✓	✓	Includes on-board controls and other power not included in the fan or dx system representations

indoor_fan_representation	The corresponding Standard 205 fan assembly representation	{RS0003}					Required if the indoor fan is packaged with the unitary equipment
fan_position	Position of the fan relative to the cooling coil	<FanPosition>			if indoor_fan_representation		
dx_system_representation	The corresponding Standard 205 direct expansion system representation	{RS0004}					
scaling	Specifies the range the performance data can be scaled to represent different capacity equipment	{Scaling}					If not present, scaling of the performance data is not allowed

Section RS0003.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0003.1 Identification and History. schema: RS0003

schema_version	Date	Initial Approved Standard	Notes
1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0003-9 revised as follows:

Table RS0003–9 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
nominal_standard_air_volumetric_flow_rate	Nominal or rated air flow rate at standard air conditions	Numeric	m^3/s	≥0.0	✓	✓	Used for calculating component wet pressure difference

is_enclosed	Fan assembly is enclosed	Boolean			✓		True if the performance data reflects the static pressure difference across the enclosure
assembly_components	An array of components included in the fan assembly air stream, not including any fans	[{AssemblyComponent}]			if is_enclosed=True		
heat_loss_fraction	Fraction of efficiency losses transferred into the air stream	Numeric	-	≥0.0, ≤1.0	✓		Used to determine amount of heat from the motor added to the air stream
maximum_impeller_rotational_speed	Maximum impeller rotational speed	Numeric	rev/s	≥0.0	✓		
minimum_impeller_rotational_speed	Minimum impeller rotational speed	Numeric	rev/s	≥0.0	✓		If no minimum, use zero
stability_curve	The system curve defining the stability area for system selection	{SystemCurve}					***Informative note:*** Application software may use this curve to indicate to application software users when a selected fan is operating in an unstable region where surging or stalling is likely to occur
operation_speed_control_type	Type of performance map	<+SpeedControlType+>			✓		• Determines which performance map data group is used for performance_map • If operation_speed_control_type is DISCRETE performance map data is provided at individual impeller speeds • If operation_speed_control_type is CONTINUOUS performance map data is provided over a range of impeller speeds

installation_speed_control_type	Type of fan impeller speed control	<InstallationSpeedControlType>			✓		• If operation_speed_control_type is DISCRETE and installation_speed_control_type is FIXED, impeller speed shall be restricted to a single discrete speed • If operation_speed_control_type is DISCRETE and installation_speed_control_type is VARIABLE, impeller speed shall be restricted to a set of two or more discrete speeds • If operation_speed_control_type is CONTINUOUS and installation_speed_control_type is FIXED, impeller speed shall be restricted to a single speed (which may be interpolated from impeller_speed values provided in the performance map) • If operation_speed_control_type is CONTINUOUS and installation_speed_control_type is VARIABLE, impeller speed shall be unrestricted within operational limits
motor_representation	The corresponding Standard 205 motor representation	{RS0005}					If the fan assembly is packaged with a motor, a motor representation shall be provided
mechanical_drive_representation	The corresponding Standard 205 mechanical drive representation	{RS0007}					If the fan assembly is packaged with a mechanical drive, a mechanical drive representation shall be provided

scaling	Specifies the range the performance data can be scaled to represent different capacity equipment	{Scaling}					If not present, scaling of the performance data is not allowed
performance_map	Data group describing fan assembly performance when operating	({PerformanceMapContinuous}, {PerformanceMapDiscrete})		operation_speed_control_type(CONTINUOUS, DISCRETE)	✓		

Table RS0003-10 revised as follows:

Table RS0003–10 AssemblyComponent

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
component_type	Type of component	<ComponentType>			✓		
component_description	Informative description of the component	String					
component_id	Identifier of the corresponding Standard 205 representation	UUID					Optionally provided if the component has a Standard 205 representation
wet_pressure_difference	Additional static pressure difference if the component is wet (e.g., because of condensate collection or wetting evaporative media)	Numeric	Pa	≥0.0	✓	✓	• Corresponds to additional pressure difference at nominal_standard_air_volumetric_flow_rate • If unknown, a value of 75 Pa shall be used

Table RS0003-11 revised as follows:

Table RS0003–11 SystemCurve

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
standard_air_volumetric_flow_rate	Volumetric air flow rate through an air distribution system at standard air conditions	[Numeric][2..]	m^3/s	≥0.0	✓	✓	
static_pressure_difference	Static pressure difference of an air distribution system	[Numeric][2..]	Pa	≥0.0	✓	✓	

Table RS0003-13 revised as follows:

Table RS0003–13 GridVariablesContinuous

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
standard_air_volumetric_flow_rate	Volumetric air flow rate through fan assembly at standard air conditions	[Numeric][1..]	m^3/s	≥0.0	✓	✓	
static_pressure_difference	External static pressure across fan assembly at dry coil conditions	[Numeric][1..]	Pa	≥0.0	✓		Any static pressure deduction (or addition) for wet coil is specified by wet_pressure_difference in 'assembly_components' data group

Table RS0003-14 revised as follows:

Table RS0003–14 LookupVariablesContinuous

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
impeller_rotational_speed	Rotational speed of fan impeller	[Numeric/Null][1..]	rev/s	≥0.0	✓		
shaft_power	Mechanical shaft power input to fan assembly	[Numeric/Null][1..]	W	≥0.0	✓	✓	Does not include the mechanical efficiency of any mechanical drive used to modify rotational speed between the motor and impeller

Table RS0003-17 revised as follows:

Table RS0003–17 LookupVariablesDiscrete

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
standard_air_volumetric_flow_rate	Volumetric air flow rate through fan assembly at standard air conditions	[Numeric/Null][1..]	m^3/s	≥0.0	✓	✓	
shaft_power	Mechanical shaft power input to fan assembly	[Numeric/Null][1..]	W	≥0.0	✓	✓	Does not include the mechanical efficiency of any mechanical drive used to modify rotational speed between the motor and impeller
impeller_rotational_speed	Rotational speed of fan impeller	[Numeric/Null][1..]	rev/s	≥0.0	✓		

Section RS0004.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0004.1 Identification and History. schema: RS0004

schema_version	Date	Initial Approved Standard	Notes
1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0004-5 revised as follows:

Table RS0004–5 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
compressor_speed_control_type	Method used to control different speeds of the compressor	<SpeedControlType>			✓		

cycling_degradation_coefficient	Cycling degradation coefficient (C_D) as described in AHRI 210/240	Numeric	-	≥0.0, <1.0	✓		• Used for the lowest stage when the unit cycles to meet load • ***Informative note:*** 340/360 specifies a fixed cycling degradation coefficient of approximately 0.12
scaling	Specifies the range the performance data can be scaled to represent different capacity equipment	{Scaling}				.	2. If not present, scaling of the performance data is not allowed
performance_map_cooling	Data group describing cooling performance over a range of conditions	{PerformanceMapCooling}			✓		
performance_map_standby	Data group describing standby performance	{PerformanceMapStandby}			✓		

Table RS0004-7 revised as follows:

Table RS0004–7 GridVariablesCooling

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
outdoor_coil_entering_dry_bulb_temperature	Dry bulb temperature of the air entering the outdoor coil	[Numeric][1..]	K	≥0.0	✓		
indoor_coil_entering_relative_humidity	Relative humidity of the air entering the indoor coil	[Numeric][1..]	-	≥0.0, ≤1.0	✓		As measured immediately before entering the coil (i.e., after the fan in a blow-through configuration)
indoor_coil_entering_dry_bulb_temperature	Dry bulb temperature of the air entering the indoor coil	[Numeric][1..]	K	≥0.0	✓		As measured immediately before entering the coil (i.e., after the fan in a blow-through configuration)
indoor_coil_air_mass_flow_rate	Mass flow rate of air entering the indoor coil	[Numeric][1..]	kg/s	>0.0	✓	✓	
compressor_sequence_number	Index indicating the relative capacity	[Integer][1..]	-	≥0	✓		• If compressor_speed_control_type is DISCRETE, sequence numbers shall be

	order of the compressor speed/stage expressed in order from lowest capacity (starting at 1) to highest capacity						provided for each discrete stage of the compressor(s) • If `compressor_speed_control_type` is `CONTINUOUS`, sufficient sequence numbers shall be provided to capture the continuous operation of the compressor(s)
`ambient_absolute_air_pressure`	Ambient absolute air pressure	`[Numeric][1..]`	Pa	`≥0.0`	✓		

Table RS0004-8 revised as follows:

Table RS0004–8 LookupVariablesCooling

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
`gross_total_capacity`	Total heat removed by the indoor coil	`[Numeric/Null][1..]`	W	`≥0.0`	✓	✓	Shall not include fan heat
`gross_sensible_capacity`	Sensible heat removed by the indoor coil	`[Numeric/Null][1..]`	W	`≥0.0`	✓	✓	Shall not include fan heat
`gross_power`	Gross power draw (of the outdoor unit)	`[Numeric/Null][1..]`	W	`>0.0`	✓	✓	• Includes compressor, outdoor fan, and any auxiliary power used by the unit's controls and any sump heater • Shall not include power drawn by the indoor fan

Table RS0004-11 revised as follows:

Table RS0004–11 LookupVariablesStandby

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
`gross_power`	Gross power draw (of the outdoor unit)	`[Numeric/Null][1..]`	W	`>0.0`	✓	✓	Includes any auxiliary power used by the unit's controls and any sump heater

Section RS0005.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0005.1 Identification and History. `schema`: RS0005

`schema_version`	Date	Initial Approved Standard	Notes
1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0005-6 revised as follows:

Table RS0005–6 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
`maximum_power`	Maximum operational input power to the motor	`Numeric`	W	`≥0.0`	✓	✓	Operational limit set to prevent overheating or overcurrent, not the rated name plate power
`standby_power`	Power draw when motor is not operating	`Numeric`	W	`≥0.0`	✓	✓	
`number_of_poles`	Number of poles	`Integer`		`>0, %2`	✓		
`drive_representation`	The corresponding Standard 205 drive representation	`{RS0006}`					
`scaling`	Specifies the range the performance data can be scaled to represent different capacity equipment	`{Scaling}`					. If not present, scaling of the performance data is not allowed

performance_map	Data group describing motor performance when operating	{PerformanceMap}					• If no performance map is defined, the motor shall be assumed to transfer all electric power directly to mechanical shaft power • ***Informative note:*** This field may be omitted for motor-driven equipment where motor efficiencies are incorporated into their performance data

Table RS0005-8 revised as follows:

Table RS0005–8 GridVariables

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
shaft_power	Delivered rotational shaft power	[Numeric/Null][1..]	W	≥0.0	✓	✓	
shaft_totaional_speed	Rotational speed of shaft	[Numeric/Null][1..]	rev/s	≥0.0	✓		

Section RS0006.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0006.1 Identification and History. schema: RS0006

schema_version	Date	Initial Approved Standard	Notes
1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0006-7 revised as follows:

Table RS0006–6 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
maximum_power	Maximum power draw of the drive	Numeric	W	≥0.0	✓	✓	
standby_power	Power draw when the motor is not operating	Numeric	W	≥0.0	✓	✓	
cooling_method	Method used to cool the drive	<CoolingMethod>			✓		
scaling	Specifies the range the performance data can be scaled to represent different capacity equipment	{Scaling}					If not present, scaling of the performance data is not allowed
performance_map	Data group describing drive performance when operating	{PerformanceMap}			✓		

Table RS0006-8 revised as follows:

Table RS0006–8 GridVariables

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
output_power	Power delivered to the motor	[Numeric/Null][1..]	W	≥0.0	✓	✓	
output_frequency	Frequency delivered to the motor	[Numeric/Null][1..]	Hz	≥0.0	✓		

Section RS0007.1 revised as follows (the schema_version and Date will depend on the order of publication of the addenda and will be completed at the time of publication):

RS0007.1 Identification and History. schema: RS0007

schema_version	Date	Initial Approved Standard	Notes

1.0.0	2023	2023	Initial publication
2.0.0	2024	2023 - Addenda a, b, & c	

Table RS0007-6 revised as follows:

Table RS0007–6 Performance

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
speed_ratio	Ratio of input shaft speed to output shaft speed	Numeric	-	>0.0	✓		
scaling	Specifies the range the performance data can be scaled to represent different capacity equipment	{Scaling}					If not present, scaling of the performance data is not allowed
performance_map	Data group describing drive performance when operating	{PerformanceMap}			✓		

Table RS0007-8 revised as follows:

Table RS0007–8 GridVariables

Name	Description	Data Type	Units	Constraints	Req	Scalable	Notes
output_power	Output shaft power	[Numeric/Null][1..]	W	≥0.0	✓	✓	

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

ASHRAE · 180 Technology Parkway · Peachtree Corners, GA 30092 · www.ashrae.org

About ASHRAE

Founded in 1894, ASHRAE is a global professional society committed to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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IMPORTANT NOTICES ABOUT THIS STANDARD

To ensure that you have all of the approved addenda, errata, and interpretations for this Standard, visit www.ashrae.org/standards to download them free of charge.

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