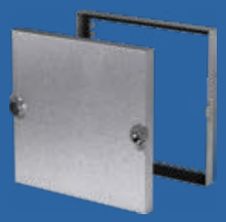
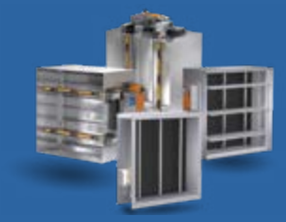
Damper Selection Guide

Metric Version



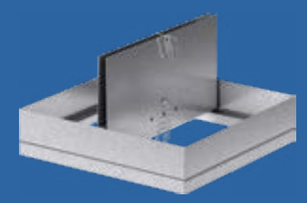
Doors - Access & Pressure Relief



Air Measuring Dampers

Backdraft Dampers

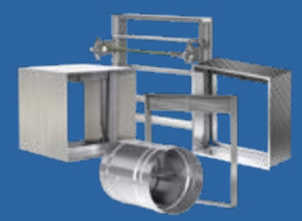
Balancing Dampers



Ceiling Radiation Dampers

Combination Fire Smoke Dampers

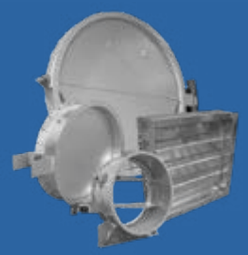
Control Dampers



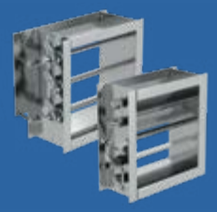
Fire Dampers

Smoke Dampers

Relief Dampers

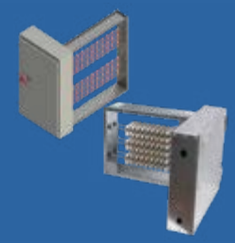


Heavy-Duty/Industrial Dampers



Specialty Application HD Dampers

Bubble-Tight Dampers



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July 2025

Model	Door Type	Pressure Relief	Leakage Class	Door Maximum Size (mm)	Velocity (FPM)	Pressure (kPa)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	DWG Drawings
Access Doors											
CAD	Cam	-	-	610 x 610	-	1.1	-		-		
HAD	Hinged	-	-	610 x 610	-	1.1	-		-		
RAD	Round	-	-	406 x 305	-	4.9	-		-		
Relief Doors											
PRAD	-	Positive	-	610 x 610	-	0.5 - 3	-				
VRAD	-	Negative	-	610 x 610	-	0.5 -3	-				

Model	Blade Type	Blade Material	Leakage Class @ 0.25 kPa	Damper Maximum Size (mm)*	Velocity Range (m/s)	Pressure (kPa)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	DWG Drawings
Air Measuring Station											
AMS	-	-	-	1524 x 1829	1.5 - 15.2	-	-				
Air Measuring - Pressure Differential											
AMD-23	3V	Galvanized Steel	1A	3658 x 3759	1.5 - 10.2	1	Air Performance/ Air Leakage				
AMD-33	Airfoil	Galvanized Steel	1A	3048 x 3759	1.5 - 15.2	1	Air Performance/ Air Leakage				
AMD-42	Airfoil	Aluminum	1A	3048 x 3759	1.5 - 15.2	1	-				
AMD-42V	Airfoil - Vertical	Aluminum	1A	1880 x 1219	1.5 - 15.2	1	-				

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Frame Material	Blade Material	Velocity (m/s)	Pressure (kPa)	Counter Balance	Airflow Direction			Mounting Position	AMCA Listing	Submittal	Installation Instructions	CSI Specs	DWG Drawings
						Vertical Up	Vertical Down	Horizontal						
Commercial Backdraft														
BD-100	Galv. Steel	Aluminum	7	.5		✓			Horizontal	Air Performance/ Air Leakage		-		
BD-300	Galv. Steel	Aluminum	7	.5				✓	Vertical	Air Performance/ Air Leakage		-		
EM-1x Series	Aluminum	Aluminum	18	2.5	✓	✓			Horizontal	Air Performance/ Air Leakage				
EM-3x Series	Aluminum	Aluminum	18	2.5	✓			✓	Vertical	Air Performance/ Air Leakage				
EM-4x Series	Aluminum	Aluminum	18	2.5	✓		✓		Horizontal					
EMV-11	Aluminum	Aluminum	18	2.5	✓	✓			Horizontal				-	-
GM-3x Series	Galv. Steel	Aluminum	18	2.5	✓			✓	Vertical				-	
WD-1xx Series	Galv. Steel	Aluminum	13	.25		✓			Horizontal			-		
WD-2xx Series	Galv. Steel	Aluminum	13	.25		✓	✓	✓	Horizontal, Vertical			-		
WD-3xx Series	Galv. Steel	Aluminum	13	.5				✓	Vertical			-		
WD-340	Galv. Steel	Aluminum	13	.5				✓	Vertical			-		
WD-400, 420, 430	Galv. Steel	Aluminum	13	.5				✓	Vertical			-		
WD-410	Galv. Steel	Aluminum	13	.5			✓		Horizontal			-		

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Frame Material	Blade Material	Velocity (m/s)	Pressure (kPa)	Counter Balance	Airflow Direction					Mounting Position	Submittal	Installation Instructions	CSI Specs	DWG Drawings
						Vertical Up	Vertical Down	Horizontal	Angular Up	Angular Down					
True Round Commercial Backdraft															
WDR-53	Galv. Steel	Aluminum	10.2	.7		✓	✓	✓			Horizontal, Vertical		-		
SSWDR-53	304SS	304SS	10.2	.7		✓	✓	✓			Horizontal, Vertical		-		
Heavy-Duty/Industrial Backdraft															
HB-110	Galv. Steel	Aluminum	19.8	1.2	✓	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-120	Galv. Steel	Galv. Steel	26.2	2.1	✓	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-230	Galv. Steel	Galv. Steel	26.2	3.4	✓	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-240	Galv. Steel	Aluminum	26.2	3.4	✓	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-330	Galv. Steel	Galv. Steel	32.5	5	✓	✓	✓	✓	✓	✓	Horizontal, Vertical				
True Round Heavy-Duty/Industrial Backdraft															
HBR-050	Galv. Steel	Galv. Steel	15.2	1.5	✓	✓	✓	✓			Horizontal, Vertical				
HBR-150	Painted Steel	Painted Steel	20.3	1.5	✓	✓	✓	✓			Horizontal, Vertical				

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Blade Type	Damper Maximum Size (mm)	Velocity (m/s)	Pressure (kPa)	Operator	Submittal	Installation Instructions	CSI Specs	DWG Drawings
Automatic Balancing Dampers									
ABD	Thermoplastic Round	203	.201 m^3/s	.5	-				
ABD-RB	Thermoplastic Round	203	.201 m^3/s	.5	-				
ABD-T	Thermoplastic Round	203	.201 m^3/s	.5	-				
ABD-FD	Thermoplastic Round/Curtain	152	.13 m^3/s	.5	-			-	
ABD-Z1	Thermoplastic Round/Galv. Steel	152	.13 m^3/s	.5	Actuator				
ABD-Z2	Thermoplastic Round/Galv. Steel	152	.13 m^3/s	.5	Actuator				
Manual Balancing Dampers									
MBD-10	Single Blade	914 x 305	10.2	.25	Manual Quadrant or Cable Operated				
MBD-15	3V	2438 x 2438	10.2	1	Manual Quadrant or Cable Operated				
MBDR-50	True Round	610	10.2	.25	Manual Quadrant or Cable Operated		-		
Remote Balancing Dampers									
RBD-10	Single Blade	914 x 305	10.2	.25	Remote Control with 9 Volt Actuator				
RBD-15	Multi-Blade	.37 sq. m	10.2	1	Remote Control with 9 Volt Actuator				
RBDR-50	True Round	610	10.2	.25	Remote Control with 9 Volt Actuator				
Bowtie Damper									
BTDR-50	True Round	381	8.1	.25	Cable Operated			-	

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Blade Type	Fire Resistance Rating*	Leakage Class	Damper Maximum Size (mm)			Submittal	Installation Instructions	CSI Specs	DWG Drawings
				Roof/Floor Assembly	Wood Truss Assembly	Wood Joist Assembly				
Ceiling Radiation Dampers										
CRD-1	Butterfly	3 Hour	-	610 x 610	-	-				
CRD-1WJ	Butterfly	1 Hour (UL Wood Joist)	-	-	-	406 x 305				
CRD-1WT	Butterfly	1 Hour (UL Wood Truss)	-	-	533 x 457	-				
CRD-2	Round Butterfly	3 Hour	-	610	-	-				
CRD-2WT	Butterfly	1 Hour (UL Wood Truss)	-	-	305 x 305	-				
CRD-60	Curtain	3 Hour	-	610 x 610	-	-				
Ceiling Radiation Dampers Leakage Rated										
CRD-501	True Round	3 Hour	I	305	-	-				

* Fire rated floor/ceiling assemblies.

DWG files will open with AutoCAD or DWG Viewer.

Model	Blade Type	Fire Resistance Rating	Leakage Class	Damper Maximum Size (mm)*		Velocity (m/s)	Pressure (kPa)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical							DWG	Revit
Corridor Fire Smoke													
CFSD-211	3V	1 hour corridor	I	601 x 610	610 x 610	10.2	1	Air Performance					-
Traditional Combination Fire Smoke													
FSD-211	3V	1½ hour	I	3658 x 2438	3251 x 2540	10.2	1.5	Air Performance					
FSD-212	3V	1½ hour	II	3658 x 2438	3251 x 2540	10.2	1.5	Air Performance					
FSD-213	3V	1½ hour	III	3658 x 2438	3251 x 2540	10.2	1.5	Air Performance					
FSD-311	Airfoil	1½ hour	I	3658 x 2438	3251 x 2540	20.3	2	Air Performance					
FSD-312	Airfoil	1½ hour	II	3658 x 2438	3251 x 2540	20.3	2	Air Performance					
FSD-331	Airfoil	3 hour	I	3048 x 2438	3048 x 2438	20.3	2	Air Performance					
SEFSD-211	3V	1½ hour	I	1219 x 762	2235 x 1829	10.2	1.5	Air Performance					
Modulating Fire Smoke													
FSD-211M	3V	1½ hour	I	1829 x 1829	1829 x 1829	10.2	1	Air Performance					
FSD-311M	Airfoil	1½ hour	I	3251 x 2438	3251 x 2540	15.2	1	Air Performance					
Vertical Blade Fire Smoke													
FSD-311V	Airfoil	1½ hour	I	-	2540 x 813	20.3	1	-					
Out of Wall Fire Smoke													
GFSD-211	3V	1½ hour	I	1219 x 1219	1219 x 1219	10.2	1	-					
OFSD-211	3V	1½ hour	I	914 x 914	914 x 914	10.2	1.5	Air Performance					
OFSD-212	3V	1½ hour	II	914 x 914	914 x 914	10.2	1.5	Air Performance					
OFSD-311	Airfoil	1½ hour	I	813 x 762	813 x 762	20.3	2	Air Performance					
True Round Fire Smoke													
FSDR-511	True Round	1½ hour	I	610	610	20.3	1	-					
SSFSDR-511	True Round	1½ hour	I	610	610	20.3	1	-					

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Blade Type	Damper Maximum Size (mm)	Velocity (m/s)	Pressure (kPa)	Leakage Class @ .25 kPa	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
										DWG	Revit
Commercial Control											
VCD-20	3V	Unlimited	15.2	1.2	-	Air Performance					
VCD-23	3V	Unlimited	15.2	1.2	1A	Air Performance Air Leakage					
VCD-33	Airfoil	Unlimited	20.3	2	1A	Air Performance Air Leakage					
VCD-34	Insulated Airfoil	Unlimited	20.3	2	1A	Air Performance Air Leakage					
VCD-40	Airfoil	Unlimited	30.5	1.5	1A	Air Performance					
VCD-42	Extruded Airfoil	Unlimited	30.5	1.5	1A	-					
VCD-43	Extruded Airfoil	Unlimited	30.5	2	1A	Air Performance Air Leakage					
SEVCD-23	3V	Unlimited	15.2	1.2	1A	Air Performance Air Leakage					
SEVCD-33	Airfoil	Unlimited	20.3	2	1A	Air Performance Air Leakage					
Face & Bypass Control											
FBV-23	3V	2438 x 1880	15.2	1.2	1A	-					-
Vertical Blade Control											
VCD-23V	3V	3759 x 2438	15.2	1.2	1A	-					
VCD-33V	Airfoil	3759 x 3048	20.3	2	1A	-					
VCD-34V	Insulated Airfoil	3759 x 3048	20.3	2	1A	-					
VCD-43V	Extruded Airfoil	3962 x 3048	30.5	2	1A	-					

Control Dampers continued on next page....

*Maximum size can be single or multiple sections.

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Model	Blade Type	Damper Maximum Size (mm)	Velocity (m/s)	Pressure (kPa)	Leakage Class @ .25 kPa	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
										DWG	Revit
Insulated Thermally Broken Control											
ICD-44	Extruded Aluminum Thermally Broken Blade	4572 x 3962	20.3	2	1A	Air Performance/ Air Leakage/ Efficiency					-
ICD-45	Extruded Aluminum Thermally Broken Blade and Frame	4572 x 3962	20.3	2	1A	Air Performance/ Air Leakage/ Efficiency					-
True Round Control											
VCDR-50	True Round	610	15.2	1	-	-					-
VCDR-53	True Round	610	15.2	1	1	-					-
True Round Multiblade Control Dampers											
VCDRM-53	Single Thickness	1219	12.7	1.2	1	-					-

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Blade Type	Damper Maximum Size (mm)	Velocity (m/s)	Pressure (kPa))	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
									DWG	Revit
Heavy-Duty Industrial Control Dampers										
HCD-120	3V	2438 x 2438	15.2	2.1	204°C					
HCD-130	Airfoil	3048 x 2438	20.3	2.1	204°C					
HCD-130-LE	Airfoil	1448 x 1448	20.3	2.1	121°C					-
HCD-135	Insulated Airfoil	3048 x 2438	20.3	2.1	121°C					-
HCD-220	3V	2438 x 2438	20.3	3.7	315°C					-
HCD-221	Flat Dual Skin w/ Perimeter Seal	2438 x 1524	20.3	2.5	204°C					-
HCD-230	Airfoil	3048 x 2438	25.4	3.7	315°C					-
HCD-230-LE	Airfoil	1981 x 1927	25.4	3.7	121°C					-
HCD-240	Extruded Airfoil	3048 x 2438	25.4	3.7	250°C					-
HCD-330	Airfoil	3048 x 2438	25.4	6.2	315°C					-
HCD-430	Airfoil	3048 x 2438	30.5	8.7	315°C					-
HCD-530	Airfoil	3048 x 2438	30.5	11.2	315°C					-
Heavy-Duty/Industrial Round Control Dampers										
HCDR-050	True Round	609	15.2	1.5	121°C					-
HCDR-150	True Round	1219	20.3	1.5	204°C					-
HCDR-152	Two-Blade	1219	20.3	1.5	204°C					-
HCDR-250	True Round	1829	26.5	3.4	315°C					-
HCDR-350	True Round	1829	32.5	5	538°C					-
HCDR-351	True Round	1219	33	5	204°F					-
HCDR-450	True Round	1524	36	7	204°F					-

*Maximum size can be single or multiple sections.

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Model	Blade Type	Fire Resistance Rating	Closure Rating	Damper Maximum Size (mm)*		Velocity (m/s)	Pressure (kPa)	Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical						DWG	Revit
Multiblade Fire												
DFD-210	3V	1½ hour	Dynamic	3251 x 2438	3251 x 2540	20.3	2.5					-
DFDAF-310	Airfoil	1½ hour	Dynamic	3658 x 2438	3251 x 2540	20.3	2					-
DFDAF-330	Airfoil	3 hour	Dynamic	3658 x 2438	3048 x 2438	20.3	2					-
SEDFD-210	3V	1½ hour	Dynamic	1219 x 762	1219 x 762	20.3	2.5					-
Out of Wall Fire												
ODFD-150	Curtain	1½ hour	Dynamic	762 x x762	914 x 914	20.3	1					-
OFD-150	Curtain	1½ hour	Static	914 x 914	914 x 914	-	-					-
True Round Fire												
DFDR-510	True Round	1½ hour	Dynamic	610	610	10.2	1					
SSDFDR-510	True Round	1½ hour	Dynamic	610	610	10.2	1					
Traditional Curtain Fire												
DFD-110	Curtain	1½ hour	Dynamic	1219 x 914	1829 x 1219 or 1524 x 1524	20.3	1					-
DFD-150	Curtain	1½ hour	Dynamic	1219 x 914	1829 x 1219 or 1524 x 1524	20.3	1					-
DFD-310	Curtain	3 hour	Dynamic	1219 x 914	1219 x 1219	20.3	1					-
DFD-350	Curtain	3 hour	Dynamic	1219 x 914	1219 x 1219	20.3	1					-

Fire Dampers cont...

*Maximum size can be single or multiple sections.

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Model	Blade Type	Fire Resistance Rating	Closure Rating	Damper Maximum Size (mm)*		Velocity (m/s)	Pressure (kPa)	Submittal	Installation Instructions	CSI Specs	DWG Drawings	
				Horizontal	Vertical							
Traditional Curtain Fire continued...												
FD-110	Curtain	1½ hour	Static	2438 x 1219	2438 x 1219	-	-					
FD-150	Curtain	1½ hour	Static	2438 x 1219 or 120 x 40	2438 x 1219 or 3048 x 1016 or 1880 x 1880	-	-					
FD-310	Curtain	3 hour	Static	-	1219 x 1219	-	-					
FD-350	Curtain	3 hour	Static	2032 x 1016	1219 x 1219	-	-					
SSDFD-150	Curtain	1½ hour	Dynamic	-	762 x 762	10.2	1					
SSDFD-350	Curtain	3 hour	Dynamic	-	762 x 762	10.2	1					
SSFD-150	Curtain	1½ hour	Static	914 x 914	2438 x 1219 or 3048 x 1016	-	-					
SSFD-350	Curtain	3 hour	Static	-	1219 x 1219	-	-					
Curtain Fire - Integral Sleeve												
DFD-150X12	Curtain	1½ hour	Dynamic	762 x 762	914 x 914	20.3	1					
DFD-150X16	Curtain	1½ hour	Dynamic	762 x 762	914 x 914	20.3	1					
FD-150X12	Curtain	1½ hour	Static	1219 x 1219	1219 x 1219	-	-					
FD-150X16	Curtain	1½ hour	Static	1219 x 1219	1219 x 1219	-	-					

*Maximum size can be single or multiple sections.

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Model	Blade Type	Leakage Class	Damper Maximum Size (mm)*		Velocity (m/s)	Pressure (kPa)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
			Horizontal	Vertical							DWG	Revit
Traditional Smoke												
SMD-201	3V	I	3251 x 2540 or 3658 x 2438	3251 x 2540 or 3658 x 2438	10.2	1.5	Air Performance					
SMD-201M	3V	I	1829 x 1829	1829 x 1829	10.2	1	Air Performance					
SMD-202	3V	II	3251 x 2540 or 3658 x 2438	3251 x 2540 or 3658 x 2438	10.2	1.5	Air Performance					
SMD-301	Airfoil	I	4877 x 2540	4877 x 2540	20.3	2	Air Performance					
SMD-301M	Airfoil	I	3251 x 2540	3251 x 2540	10.2	1	Air Performance					
SMD-302	Airfoil	II	4877 x 2540	4877 x 2540	20.3	2	Air Performance					
SMD-401	Extruded Airfoil	I	4877 x 3048	4877 x 3048	15.2	1.5	-					
SMD-401EF	Extruded Airfoil	I	4877 x 3048	4877 x 3048	15.2	1.5	Air Performance					
SMD-401M	Extruded Airfoil	I	914 x 1829	914 x 1829	10.2	1	-					
SESMD-201	3V	I	1219 x 762	2235 x 1829	10.2	1.5	Air Performance					
Vertical Blade Smoke												
SMD-301V	Airfoil	I	-	2540 x 813	20.3	2	-					
True Round Smoke												
SMDR-501	True Round	I	610	610	20.3	1	-					-
SSSMDR-501	True Round	I	610	610	20.3	1	-					-

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Frame Material	Blade Material	Counter Balance	Velocity (m/s)	Back Pressure (kPa)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	DWG Drawings
						Vertical Up	Vertical Down	Horizontal					
Barometric Relief													
BR-1x Series	Galv. Steel	Aluminum	✓	10.2	0.5	✓			Horizontal				
BR-3x Series	Galv. Steel	Aluminum	✓	10.2	0.5			✓	Vertical				
BR-4x Series	Galv. Steel	Aluminum	✓	10.2	0.5		✓		Horizontal				
SEBR-1x Series	316SS	316SS	✓	10.2	0.5	✓			Horizontal				
SEBR-3x Series	316SS	316SS	✓	10.2	0.5			✓	Vertical				
SEBR-4x Series	316SS	316SS	✓	10.2	0.5		✓		Horizontal				
Heavy-Duty/Industrial Pressure Relief													
HPR-120	Galv. Steel	Galv. Steel	✓	26.2	2.1	✓	✓	✓	Horizontal, Vertical				
HPR-230	Galv. Steel	Galv. Steel	✓	26.2	3.4	✓	✓	✓	Horizontal, Vertical				
HPR-330	Galv. Steel	Galv. Steel	✓	32.5	5	✓	✓	✓	Horizontal, Vertical				

*Maximum size can be single or multiple sections.

DWG files will open with AutoCAD or DWG Viewer.

Model	Blade Type	Damper Maximum Size (mm)	Velocity (m/s)	Pressure (kPa)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
									DWG	Revit
Heavy-Duty Industrial Control Dampers										
HCD-120	3V	2438 x 2438	15.2	2.1	204°C					
HCD-130	Airfoil	3048 x 2438	20.3	2.1	204°C					
HCD-130-LE	Airfoil	1448 x 1448	20.3	2.1	121°C					-
HCD-135	Insulated Airfoil	3048 x 2438	20.3	2.1	121°C					-
HCD-220	3V	2438 x 2438	20.3	3.7	315°C					-
HCD-221	Flat Dual Skin w/ Perimeter Seal	2438 x 1524	20.3	2.5	204°C					-
HCD-230	Airfoil	3048 x 2438	25.4	3.7	315°C					-
HCD-230-LE	Airfoil	1981 x 1927	25.4	3.7	121°C					-
HCD-240	Extruded Airfoil	3048 x 2438	25.4	3.7	250°F					-
HCD-330	Airfoil	3048 x 2438	25.4	6.2	315°C					-
HCD-430	Airfoil	3048 x 2438	30.5	8.7	315°C					-
HCD-530	Airfoil	3048 x 2438	30.5	11.2	315°C					-
Heavy-Duty/Industrial Round Control Dampers										
HCDR-050	True Round	609	15.2	1.5	121°C					-
HCDR-150	True Round	1219	20.3	1.5	204°C					-
HCDR-152	Two-Blade	1219	20.3	1.5	204°C					-
HCDR-250	True Round	1829	26.5	3.4	315°C					-
HCDR-350	True Round	1829	32.5	5	538°C					-
HCDR-351	True Round	1219	33	5	204°C					-
HCDR-450	True Round	1524	36	7	204°C					-

Heavy-Duty Dampers continued on next page...

*Maximum size can be single or multiple sections.

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Model	Frame Material	Blade Material	Counter Balance	Velocity (m/s)	Back Pressure (kPa)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	DWG Drawings
						Vertical Up	Vertical Down	Horizontal					
Heavy-Duty/Industrial Pressure Relief													
HPR-120	Galv. Steel	Galv. Steel	✓	26.2	2.1	✓	✓	✓	Horizontal, Vertical				
HPR-230	Galv. Steel	Galv. Steel	✓	26.2	3.4	✓	✓	✓	Horizontal, Vertical				
HPR-330	Galv. Steel	Galv. Steel	✓	32.5	5	✓	✓	✓	Horizontal, Vertical				

Model	Frame Material	Blade Material	Velocity (m/s)	Pressure (kPa)	Airflow Direction					Mounting Position	Submittal	Installation Instructions	CSI Specs	DWG Drawings
					Vertical Up	Vertical Down	Horizontal	Angular Up	Angular Down					
Heavy-Duty/Industrial Backdraft														
HB-110	Galv. Steel	Aluminum	19.8	1.2	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-120	Galv. Steel	Galv. Steel	26.2	2.1	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-230	Galv. Steel	Galv. Steel	26.2	3.4	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-240	Galv. Steel	Aluminum	26.2	3.4	✓	✓	✓	✓	✓	Horizontal, Vertical				
HB-330	Galv. Steel	Galv. Steel	32.5	5	✓	✓	✓	✓	✓	Horizontal, Vertical				
True Round Heavy-Duty/Industrial Backdraft														
HBR-050	Galv. Steel	Galv. Steel	15.2	1.5	✓	✓	✓			Horizontal, Vertical				
HBR-150	Painted Steel	Painted Steel	20.3	1.5	✓	✓	✓			Horizontal, Vertical				

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Model	Damper Maximum Size (mm)	Velocity (m/s)	Pressure (kPa)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	DWG Drawings
Blast Damper								
HBS-330	1956 x 2438	20.3	7 - 40	121°C				
HBS-430	914 x 1219	20.3	7-103	121°C				
Tornado Damper								
HTOD-330	1219 x 1524	20.3	20.7	121°C				

Model	Blade Type	Velocity (m/s)	Pressure (kPa)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
								DWG	Revit
True Round Bubble-Tight Damper									
HBTR-151	True Round	19.8	2.4	121°C					
HBTR-451	True Round	33	7.5	121°C					-
HBTR-551	True Round	33	10	121°C					-
Rectangular Bubble-Tight Damper									
HBT-221	Rectangular	20.3	2.5	121°C					-
HBT-321	Rectangular	20.3	5	121°C					-

Model	Type	Heater Max Size (mm)	Max Capacity	Airflow Direction	Submittal	Installation Instructions	CSI Specs	Drawings	
								DWG	Revit
Duct Heaters									
IDHB	Basic	914 x 914 or 889 x 864	39.9 kW	Horizontal, Vertical Up				-	
IDHE	Universal	3048 x 3658	478.8 kW	Universal					
IDHE-O	Universal - Outdoor	3048 x 1473	478.8 kW	Universal				-	

*Maximum size can be single or multiple sections.

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