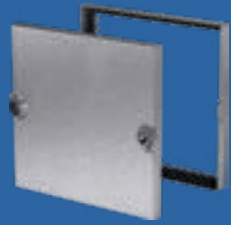
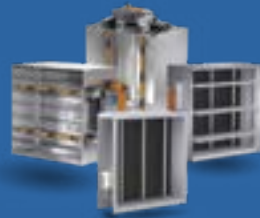


# Damper Selection Guide



Doors - Access & Pressure Relief



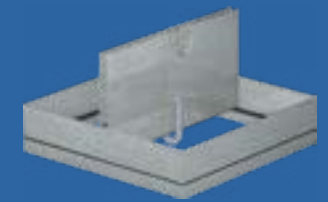
Air Measuring Dampers



Backdraft Dampers



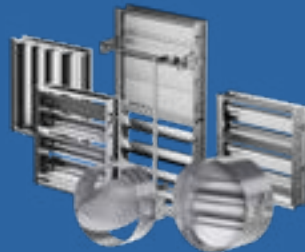
Balancing Dampers



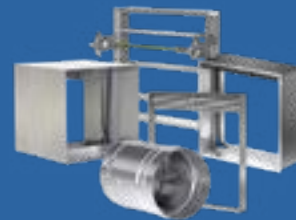
Ceiling Radiation Dampers



Combination Fire Smoke Dampers



Control Dampers



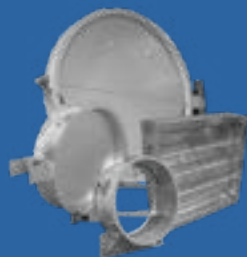
Fire Dampers



Smoke Dampers



Relief Dampers



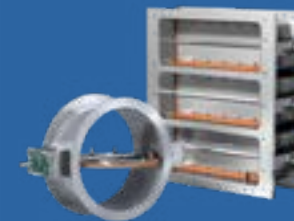
Heavy-Duty/Industrial Dampers



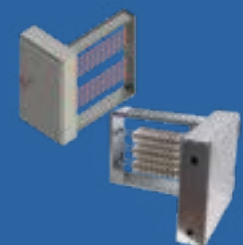
Specialty Application HD Dampers

























Tunnel Transit Dampers
















































Bubble-Tight Dampers








































Duct Heaters

Model	Door Type	Pressure Relief	Leakage Class	Door Maximum Size	Velocity (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
											PDF	DWG
Access Doors												
CAD	Cam	-	-	24 x 24	-	4½	-		-			
HAD	Hinged	-	-	24 x 24	-	4½	-		-			
RAD	Round	-	-	16 x 12	-	20	-		-			
Relief Doors												
PRAD	-	Positive	-	24 x 24	-	12	-					
VRAD	-	Negative	-	24 x 24	-	12	-					












































Model	Blade Type	Blade Material	Leakage Class @ 1 in. wg	Damper Maximum Size*	Velocity Range (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	PDF	DWG
Air Measuring Station												
AMS	-	-	-	60 x 72	300 - 3000	-	-					
Air Measuring - Pressure Differential												
AMD-23	3V	Galvanized Steel	1A	144 x 148	300 - 2000	4	Air Performance/ Air Leakage					
AMD-33	Airfoil	Galvanized Steel	1A	144 x 148	300 - 3000	4	Air Performance/ Air Leakage					
AMD-42	Airfoil	Aluminum	1A	144 x 148	300 - 3000	4	-					
AMD-42V	Airfoil - Vertical	Aluminum	1A	74 x 48	300 - 3000	4	-					
Air Measuring - Thermal Dispersion												
AMD-23-TD	3V	Galvanized Steel	1A	118 x 74	100 - 2000	4	-					
AMD-33-TD	Airfoil	Galvanized Steel	1A	118 x 74	100 - 3000	4	-					
AMD-42-TD	Airfoil	Aluminum	1A	118 x 74	100 - 3000	4	-					
AMD-42V-TD	Airfoil - Vertical	Aluminum	1A	74 x 60	100 - 3000	4	-					

\*Maximum size can be single or multiple sections.




























































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Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Counter Balance	Airflow Direction			Mounting Position	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal						PDF	DWG
Commercial Backdraft															
BD-100	Galv. Steel	Aluminum	1500	2		✓			Horizontal	Air Performance/ Air Leakage		-			
BD-300	Galv. Steel	Aluminum	1500	2				✓	Vertical	Air Performance/ Air Leakage		-			
EM-1x Series	Aluminum	Aluminum	3500	10	✓	✓			Horizontal	Air Performance/ Air Leakage					
EM-3x Series	Aluminum	Aluminum	3500	10	✓			✓	Vertical	Air Performance/ Air Leakage					
EM-4x Series	Aluminum	Aluminum	3500	10	✓		✓		Horizontal						
EMV-11	Aluminum	Aluminum	3500	10	✓	✓			Horizontal				-	-	-
GM-3x Series	Galv. Steel	Aluminum	2500	4	✓			✓	Vertical				-		
WD-1xx Series	Galv. Steel	Aluminum	2500	1		✓			Horizontal			-			
WD-2xx Series	Galv. Steel	Aluminum	2500	1		✓	✓	✓	Horizontal, Vertical			-			
WD-3xx Series	Galv. Steel	Aluminum	2500	2				✓	Vertical			-			
WD-340	Galv. Steel	Aluminum	2500	2				✓	Vertical			-			
WD-400, 420, 430	Galv. Steel	Aluminum	2500	2				✓	Vertical			-			
WD-410	Galv. Steel	Aluminum	2500	2			✓		Horizontal			-			














































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Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Counter Balance	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal					PDF	DWG
True Round Commercial Backdraft														
WDR-53	Galv. Steel	Aluminum	2000	3		✓	○	○	Horizontal, Vertical		-			
SSWDR-53	304SS	304SS	2000	3		✓	○	○	Horizontal, Vertical		-			
Heavy-Duty/Industrial Backdraft														
HB-110	Galv. Steel	Aluminum	3900	5	✓	○	○	✓	Horizontal, Vertical					
HB-120	Galv. Steel	Galv. Steel	5150	8.5	✓	○	○	✓	Horizontal, Vertical					
HB-230	Galv. Steel	Galv. Steel	5150	13.5	✓	○	○	✓	Horizontal, Vertical					
HB-240	Galv. Steel	Aluminum	5150	13.5	✓	○	○	✓	Horizontal, Vertical					
HB-330	Galv. Steel	Galv. Steel	6400	20	✓	○	○	✓	Horizontal, Vertical					
True Round Heavy-Duty/Industrial Backdraft														
HBR-050	Painted Steel	Painted Steel	3000	6	✓	○	○	✓	Horizontal, Vertical					
HBR-150	Painted Steel	Painted Steel	4000	6	✓	○	○	✓	Horizontal, Vertical					

**DWG files will open with AutoCAD or DWG Viewer.**

Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Operator	Submittal	Installation Instructions	CSI Specs	Drawings	
									PDF	DWG
Automatic Balancing Dampers										
ABD	Thermoplastic Round	8	425 cfm	2	-					
ABD-RB	Thermoplastic Round	8	425 cfm	2	-					
ABD-T	Thermoplastic Round	8	425 cfm	2	-					
ABD-FD	Thermoplastic Round/Curtain	6	275 cfm	2	-			-		
ABD-Z1	Thermoplastic Round/Galv. Steel	6	275 cfm	2	Actuator					
ABD-Z2	Thermoplastic Round/Galv. Steel	6	275 cfm	2	Actuator				-	
Manual Balancing Dampers										
MBD-10	Single Blade	36 x 12	2000	2	Manual Quadrant or Cable Operated					
MBD-15	3V	96 x 96	2000	4	Manual Quadrant or Cable Operated					
MBDR-50	True Round	24	2000	1	Manual Quadrant or Cable Operated		-			
Remote Balancing Dampers										
RBD-10	Single Blade	36 x 12	2000	1	Remote Control with 9 Volt Actuator					
RBD-15	Multi-Blade	48 x 48	2000	4	Remote Control with 9 Volt Actuator				-	
RBDR-50	True Round	24	2000	1	Remote Control with 9 Volt Actuator					
Bowtie Damper										
BTDR-50	True Round	15	1600	1	Cable Operated			-	-	







































































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Model	Blade Type	Fire Resistance Rating*	Leakage Class	Damper Maximum Size (Inches)			Submittal	Installation Instructions	CSI Specs	Drawings	
				Roof/Floor Assembly	Wood Truss Assembly	Wood Joist Assembly				PDF	DWG
Ceiling Radiation Dampers											
CRD-1	Butterfly	3 Hour	-	24 x 24	-	-					
CRD-1LP	Low Profile Butterfly	3 Hour	-	24 x 24	-	-					
CRD-1WJ	Butterfly	1 Hour (UL Wood Joist)	-	-	-	16 x 12					
CRD-1WT	Butterfly	1 Hour (UL Wood Truss)	-	-	21 x 18	-					
CRD-2	Round Butterfly	3 Hour	-	24	-	-					
CRD-2WT	Butterfly	1 Hour (UL Wood Truss)			12 x 12						
CRD-60	Curtain	3 Hour	-	24 x 24	-	-					
CRD-60X	Curtain w/Insulation skirt	3 Hour	-	24 x 24	-	-					
Ceiling Radiation Dampers Leakage Rated											
CRD-501	True Round	3 Hour	I	12	-	-					

\* Fire rated floor/ceiling assemblies.

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Model	Blade Type	Fire Resistance Rating	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
				Horizontal	Vertical							PDF	DWG	Revit
Corridor Fire Smoke														
CFSD-211	3V	1 hour	I	24 x 24	24 x 24	2000	6	Air Performance						-
Traditional Combination Fire Smoke														
FSD-211	3V	1½ hour	I	144 x 96	128 x 100	2000	6	Air Performance						
FSD-212	3V	1½ hour	II	144 x 96	128 x 100	2000	6	Air Performance						
FSD-213	3V	1½ hour	III	144 x 96	128 x 100	2000	6	Air Performance						
FSD-311	Airfoil	1½ hour	I	144 x 96	128 x 100	4000	8	Air Performance						
FSD-312	Airfoil	1½ hour	II	144 x 96	128 x 100	4000	8	Air Performance						
FSD-331	Airfoil	3 hour	I	120 x 96	120 x 96	4000	8	Air Performance						
SEFSD-211	3V	1½ hour	I	48 x 30	88 x 72	2000	6	Air Performance						
SSFSD-211	3V	1½ hour	I	48 x 30	88 x 72	2000	6	Air Performance						
Modulating Fire Smoke														
FSD-211M	3V	1½ hour	I	72 x 72	72 x 72	2000	4	Air Performance						
FSD-311M	Airfoil	1½ hour	I	128 x 96	128 x 100	2000	4	Air Performance						
Vertical Blade Fire Smoke														
FSD-311V	Airfoil	1½ hour	I	-	100 x 32	4000	4	-						

\*Maximum size can be single or multiple sections.

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Combination Fire Smoke Dampers cont....

Model	Blade Type	Fire Resistance Rating	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
				Horizontal	Vertical							PDF	DWG	Revit
Out of Wall Fire Smoke														
GFSD-211	3V	1½ hour	I	48 x 48	48 x 48	2000	4	-						
OFSD-211	3V	1½ hour	I	36 x 36	36 x 36	2000	6	Air Performance						
OFSD-212	3V	1½ hour	II	36 x 36	36 x 36	2000	6	Air Performance						
OFSD-311	Airfoil	1½ hour	I	36 x 36	36 x 36	4000	8	Air Performance						
True Round Fire Smoke														
FSDR-511	True Round	1½ hour	I	24	24	3000	4	-						
SSFSDR-511	True Round	1½ hour	I	24	24	3000	4	-						

\*Maximum size can be single or multiple sections.


















































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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
										PDF	DWG	Revit
Commercial Control Dampers												
VCD-20	3V	Unlimited	3000	5	-	Air Performance						
VCD-23	3V	Unlimited	3000	5	1A	Air Performance Air Leakage						
VCD-33	Airfoil	Unlimited	4000	8	1A	Air Performance Air Leakage						
VCD-34	Insulated Airfoil	Unlimited	4000	8	1A	Air Performance Air Leakage						
VCD-40	Airfoil	Unlimited	6000	6	1A	Air Performance						
VCD-42	Extruded Airfoil	Unlimited	6000	6	1A	-						
VCD-43	Extruded Airfoil	Unlimited	6000	8	1A	Air Performance Air Leakage						
SEVCD-23	3V	Unlimited	3000	5	1A	Air Performance Air Leakage						
SEVCD-33	Airfoil	Unlimited	4000	8	1A	Air Performance Air Leakage						
Face & Bypass Control Dampers												
FBH-23	3V	144 x 74	3000	5	1A	-						-
FBV-23	3V	96 x 148	3000	5	1A	-						-
FBH-33	Airfoil	156 x 74	4000	8	1A	-						-
FBV-33	Airfoil	120 x 120 or 96 x 148	4000	8	1A	-						-
FBH-43	Extruded Aluminum	156 x 74	6000	8	1A	-						-
FBV-43	Extruded Aluminum	120 x 120 or 96 x 148	6000	8	1A	-						-

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Control Dampers cont....

Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
										PDF	DWG	Revit
Vertical Blade Control Dampers												
VCD-23V	3V	148 x 96	3000	5	1A	-						
VCD-33V	Airfoil	148 x 120	4000	8	1A	-						
VCD-34V	Insulated Airfoil	148 x 120	4000	8	1A	-						
VCD-43V	Extruded Airfoil	148 x 120	6000	8	1A	-						
Insulated Thermally Broken Control Dampers												
ICD-44	Extruded Aluminum	180 x 148	4000	8	1A	Air Performance/ Air Leakage/ Efficiency						-
ICD-45	Extruded Aluminum - Thermally Broken	180 x 120	4000	8	1A	Air Performance/ Air Leakage/ Efficiency						-
True Round Control Dampers												
VCDR-50	True Round	24	3000	4	-	-						-
VCDR-53	True Round	24	3000	4	1	-						-
True Round Multiblade Control Dampers												
VCDRM-53	Single Thickness	48	2500	5	1	-						-

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Leakage Class @ 1 in. wg	Submittal	Installation Instructions	CSI Specs	Drawings	
									PDF	DWG
Heavy-Duty/Industrial Control Dampers										
HCD-120	3V	96 x 96	3000	8.5	See Submittal					
HCD-130	Airfoil	120 x 96	4000	8.5	See Submittal					
HCD-130-LE	Airfoil	120 x 96	4000	8.5	See Submittal				-	-
HCD-135	Insulated Airfoil	120 x 96	4000	8.5	See Submittal					
HCD-220	3V	96 x 96	4000	15	See Submittal					
HCD-221	Flat Dual Skin w/ Perimeter Seal	96 x 60	4000	10	Less than 1 cfm/ft²					
HCD-230	Airfoil	120 x 96	5000	15	See Submittal					
HCD-230-LE	Airfoil	120 x 96	5000	15	See Submittal				-	-
HCD-240	Extruded Airfoil	120 x 96	5000	15	See Submittal					
HCD-324	High Temp Airfoil	48 x 60	5000	25	See Submittal					
HCD-330	Airfoil	120 x 96	5000	25	See Submittal					
HCD-430	Airfoil	120 x 96	6000	35	See Submittal					
HCD-524	High Temp Airfoil	60 x 60	5000	45	See Submittal					
HCD-530	Airfoil	120 x 96	6000	45	See Submittal					
True Round Heavy-Duty/Industrial Control Dampers										
HCDR-050	True Round	24	3000	6	See Submittal					
HCDR-150	True Round	48	4000	6	See Submittal					
HCDR-152	Two-Blade	48	4000	6	See Submittal					
HCDR-250	True Round	72	5150	13.5	See Submittal					
HCDR-350	True Round	72	6400	20	See Submittal					
HCDR-351	True Round	48	6500	20	See Submittal					
HCDR-450	True Round	60	7000	30	See Submittal					

























































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Model	Blade Type	Fire Resistance Rating	Closure Rating	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical							PDF	DWG
Multiblade Fire													
DFD-210	3-V	1½ hour	Dynamic	128 x 96	128 x 100	4000	10	Air Performance					
DFDAF-310	Airfoil	1½ hour	Dynamic	144 x 96	128 x 100	4000	8	Air Performance					
DFDAF-330	Airfoil	3 hour	Dynamic	144 x 96	120 x 96	4000	8	Air Performance					
SEDFD-210	3-V	1½ hour	Dynamic	48 x 30	48 x 30	4000	10	Air Performance					
Out of Wall Fire													
ODFD-150	Curtain	1½ hour	Dynamic	36 x 36	36 x 36	4000	4	-					
OFD-150	Curtain	1½ hour	Static	36 x 36	36 x 36	-	-	-					
True Round Fire													
DFDR-510	True Round	1½ hour	Dynamic	24	24	2000	4	-					
SSDFDR-510	True Round	1½ hour	Dynamic	24	24	2000	4	-					
Traditional Curtain Fire													
DFD-110	Curtain	1½ hour	Dynamic	48 x 36	72 x 48	4000	4	-					
DFD-150	Curtain	1½ hour	Dynamic	48 x 36	72 x 48 or 60 x 60 or 120 x 30	4000	4	-					
DFD-310	Curtain	3 hour	Dynamic	40 x 36	48 x 48	4000	4	-					
DFD-350	Curtain	3 hour	Dynamic	40 x 36	48 x 48	4000	4	-					

\*Maximum size can be single or multiple sections.
























































































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Fire Dampers cont...

Model	Blade Type	Fire Resistance Rating	Closure Rating	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)		Submittal	Installation Instructions	CSI Specs	Drawings	
				Horizontal	Vertical							PDF	DWG
Traditional Curtain Fire continued...													
FD-110	Curtain	1½ hour	Static	96 x 48	96 x 48	-	-						
FD-150	Curtain	1½ hour	Static	96 x 48 or 120 x 40	96 x 48 or 120 x 40 or 74 x 74	-	-						
FD-310	Curtain	3 hour	Static	-	48 x 48	-	-						
FD-350	Curtain	3 hour	Static	80 x 40	48 x 48	-	-						
KFD-150	Curtain	1½ hour	Static	48 x 48	-	-	-				-		
KFD-350	Curtain	3 hour	Static	40 x 40	-	-	-				-		
SSDFD-150	Curtain	1½ hour	Dynamic	-	30 x 30	2000	4						
SSDFD-350	Curtain	3 hour	Dynamic	-	30 x 30	2000	4						
SSFD-150	Curtain	1½ hour	Static	36 x 36	96 x 48 or 120 x 40	-	-						
SSFD-350	Curtain	3 hour	Static	-	48 x 48	-	-						
Curtain Fire - Integral Sleeve													
DFD-150X12	Curtain	1½ hour	Dynamic	30 x 30	36 x 36	4000	4						
DFD-150X16	Curtain	1½ hour	Dynamic	30 x 30	36 x 36	4000	4						
FD-150X12	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-						
FD-150X16	Curtain	1½ hour	Static	48 x 48	48 x 48	-	-						

\*Maximum size can be single or multiple sections.














































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Model	Blade Type	Leakage Class	Damper Maximum Size*		Velocity (FPM)	Pressure (in. wg)	AMCA Listing	Submittal	Installation Instructions	CSI Specs	Drawings		
			Horizontal	Vertical							PDF	DWG	Revit
Traditional Smoke													
SMD-201	3V	I	144 x 96, 128 x 100, or 288 x 50	144 x 96, 128 x 100, or 288 x 50	2000	6	Air Performance						
SMD-201M	3V	I	72 x 72	72 x 72	2000	4	Air Performance						
SMD-202	3V	II	144 x 96, 128 x 100, or 288 x 50	144 x 96, 128 x 100, or 288 x 50	2000	6	Air Performance						
SMD-301	Airfoil	I	192 x 100	192 x 100	4000	8	Air Performance						
SMD-301M	Airfoil	I	128 x 100	128 x 100	2000	4	Air Performance						
SMD-302	Airfoil	II	192 x 100	192 x 100	4000	8	Air Performance						
SMD-302M	Airfoil	II	128 x 100	128 x 100	2000	4	Air Performance						
SMD-401	Extruded Airfoil	I	192 x 120	192 x 120	3000	6	-						
SMD-401EF	Extruded Airfoil	I	192 x 120	192 x 120	3000	6	Air Performance						
SMD-401M	Extruded Airfoil	I	36 x 72	36 x 72	2000	4	-						
SESMD-201	3V	I	48 x 72	88 x 72	2000	6	Air Performance						
SSSMD-201	3V	I	48 x 72	88 x 72	2000	6	Air Performance						
Vertical Blade Smoke													
SMD-301V	Airfoil	I	-	100 x 32	4000	4	-						
True Round Smoke													
SMDR-501	True Round	I	24	24	3000	4	-						-
SSSMDR-501	True Round	I	24	24	3000	4	-						-











































\*Maximum size can be single or multiple sections.

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Model	Frame Material	Blade Material	Counter Balance	Velocity (FPM)	Back Pressure (in. wg)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal					PDF	DWG
Barometric Relief														
BR-1x Series	Galv. Steel	Aluminum	✓	2000	2	✓			Horizontal					
BR-3x Series	Galv. Steel	Aluminum	✓	2000	2			✓	Vertical					
BR-4x Series	Galv. Steel	Aluminum	✓	2000	2		✓		Horizontal					
SEBR-1x Series	316SS	316SS	✓	2000	2	✓			Horizontal					
SEBR-3x Series	316SS	316SS	✓	2000	2			✓	Vertical					
SEBR-4x Series	316SS	316SS	✓	2000	2		✓		Horizontal					
Heavy-Duty/Industrial Pressure Relief														
HPR-120	Galv. Steel	Galv. Steel	✓	5150	8.5	✓	✓	✓	Horizontal, Vertical					
HPR-230	Galv. Steel	Galv. Steel	✓	5150	13.5	✓	✓	✓	Horizontal, Vertical					
HPR-330	Galv. Steel	Galv. Steel	✓	6400	20	✓	✓	✓	Horizontal, Vertical					




































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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
									PDF	DWG
Heavy-Duty Industrial Control Dampers										
HCD-120	3V	96 x 96	3000	8.5	400°F					
HCD-130	Airfoil	120 x 96	4000	8.5	400°F					
HCD-130-LE	Airfoil	120 x 96	4000	8.5	400°F				-	
HCD-135	Insulated Airfoil	120 x 96	4000	8.5	250°F					
HCD-220	3V	96 x 96	4000	15	600°F					
HCD-221	Flat Dual Skin w/ Perimeter Seal	96 x 60	4000	10	400°F					
HCD-230	Airfoil	120 x 96	5000	15	600°F					
HCD-230-LE	Airfoil	120 x 96	5000	15	600°F				-	
HCD-240	Extruded Airfoil	120 x 96	5000	15	250°F					
HCD-324	High Temp Airfoil	48 x 60	5000	25	1000°F					
HCD-330	Airfoil	120 x 96	5000	25	600°F					
HCD-430	Airfoil	120 x 96	6000	35	600°F					
HCD-524	High Temp Airfoil	60 x 60	5000	45	1000°F					
HCD-530	Airfoil	120 x 96	6000	45	600°F					
Heavy-Duty/Industrial Round Control Dampers										
HCDR-050	True Round	24	3000	6	250°F					
HCDR-150	True Round	48	4000	6	400°F					
HCDR-152	Two-Blade	48	4000	6	400°F					
HCDR-250	True Round	72	5150	13.5	600°F					
HCDR-350	True Round	72	6400	20	1000°F					
HCDR-351	True Round	48	6500	20	400°F					
HCDR-450	True Round	60	7000	30	400°F					































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Heavy-Duty Dampers cont...

Model	Frame Material	Blade Material	Counter Balance	Velocity (FPM)	Back Pressure (in. wg)	Airflow Direction			Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
						Vertical Up	Vertical Down	Horizontal					PDF	DWG
Heavy-Duty/Industrial Pressure Relief														
HPR-120	Galv. Steel	Galv. Steel	✓	5150	8.5	O	O	✓	Horizontal, Vertical					
HPR-230	Galv. Steel	Galv. Steel	✓	5150	13.5	O	O	✓	Horizontal, Vertical					
HPR-330	Galv. Steel	Galv. Steel	✓	6400	20	O	O	✓	Horizontal, Vertical					









Model	Frame Material	Blade Material	Velocity (FPM)	Pressure (in. wg)	Airflow Direction					Mounting Position	Submittal	Installation Instructions	CSI Specs	Drawings	
					Vertical Up	Vertical Down	Horizontal	Angular Up	Angular Down					PDF	DWG
Heavy-Duty/Industrial Backdraft															
HB-110	Galv. Steel	Aluminum	3900	5	O	O	✓	O	O	Horizontal, Vertical					
HB-120	Galv. Steel	Galv. Steel	5150	8.5	O	O	✓	O	O	Horizontal, Vertical					
HB-230	Galv. Steel	Galv. Steel	5150	13.5	O	O	✓	O	O	Horizontal, Vertical					
HB-240	Galv. Steel	Aluminum	5150	13.5	O	O	✓	O	O	Horizontal, Vertical					
HB-330	Galv. Steel	Galv. Steel	6400	20	O	O	✓	O	O	Horizontal, Vertical					
True Round Heavy-Duty/Industrial Backdraft															
HBR-050	Galv. Steel	Galv. Steel	3000	6	O	O	✓			Horizontal, Vertical					
HBR-150	Painted Steel	Painted Steel	4000	6	O	O	✓			Horizontal, Vertical					





















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Specialty Application HD Dampers									
Model	Blast Direction	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
								PDF	DWG
Blast Damper									
HBS-330	Same as Normal Airflow	500-6400	160 (5.77 psi)	250°F					
HBS-331	Opposite Normal Airflow	500-6400	160 (5.77 psi)	250°F					
HBS-430	Same as Normal Airflow	500-4000	415 (15 psi)	250°F					
HBS-431	Opposite Normal Airflow	500-4000	415 (15 psi)	250°F					
Tornado Damper									
HTOD-330	Same as Normal Airflow	500-6400	83	250°F					
HTOD-331	Opposite Normal Airflow	500-6400	83	250°F					

Model	Blade Type	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
								PDF	DWG
Rectangular Shock and Toxic Gas Damper									
HSV-230	Fabricated Airfoil	5000	15	250°F		-	-		
HTG-230	Fabricated Airfoil	5000	15	250°F		-	-	-	
True Round Shock and Toxic Gas Damper									
HSVR-250	True Round	4000	13.5	400°F		-	-		
HTGR-250	True Round	4000	13.5	400°F		-	-	-	

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Model	Blade Type	Damper Maximum Size	Velocity (FPM)	Maximum Temperature	Pressure (in. wg)	NFPA 130	NFPA 502	BS476	Submittal	Installation Instructions	CSI Specs	Drawings	
												PDF	DWG
Tunnel Transit													
HTD-621	Dual Skin w/ Perimeter Seal	60 x 96	4000	250°F continuous; 482°F for 2 hours	24	✓	✓				-	<a href="#">Consult Factory</a>	
HTD-630	Airfoil	60 x 96 or 72 x 120	4000	250°F continuous; 482°F for 2 hours	24	✓	✓				-	<a href="#">Consult Factory</a>	
HTD-636	Airfoil	48 x 96	4000	482°F for 2 hours; 752°F for 1 hour	24	✓	✓	✓			-	<a href="#">Consult Factory</a>	
HTD-640	Extruded Airfoil	48 x 96	4000	250°F continuous; 482°F for 1 hour	24	✓					-	<a href="#">Consult Factory</a>	

Model	Blade Type	Velocity (FPM)	Pressure (in. wg)	Maximum Temperature	Submittal	Installation Instructions	CSI Specs	Drawings	
								PDF	DWG
True Round Bubble-Tight Damper									
HBTR-151	True Round	3900	10	250°F					
HBTR-451	True Round	6500	30	250°F					
HBTR-551	True Round	6500	30	250°F					
Rectangular Bubble-Tight Damper									
HBT-221	Rectangular	3900	10	250°F					

Model	Type	Heater Max Size	Max Capacity	Airflow Direction	Submittal	Installation Instructions	CSI Specs	Drawings	
								DWG	Revit
Duct Heaters									
IDHB	Basic	36 x 36 or 35 x 34	39.9 kW	Horizontal, Vertical Up				-	
IDHE	Universal	120 x 144	478.8 kW	Universal					
IDHE-O	Universal - Outdoor	120 x 58	478.8 kW	Universal				-	

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