

BD-BOX-HT

VENTILATORE CASSONATO PER FUMI D'INCENDIO SECONDO EN 12101-3

SMOKE EXHAUST CABINET FAN
ACCORDING TO EN 12102-3

F400



APPLICAZIONI

I ventilatori cassonati della serie BD-BOX-HT sono impiegati negli impianti dove è necessaria l'estrazione dei fumi d'incendio in ambienti quali parcheggi interrati, centri commerciali, ospedali, scuole, teatri, musei, ecc.

La serie BD-BOX-HT è progettata e costruita in ottemperanza alla direttiva Europea EN 12101-3 ottenendo la certificazione da un Ente Autonomo Qualificato.

I BD-BOX-HT sono idonei al funzionamento per il convogliamento d'aria pulita e fumi non polverosi, fino alla temperatura massima di 150°C in servizio continuo o in caso di emergenza alla temperatura di 400°C per 120 minuti (F400).

Per installazione all'esterno della zona a rischio d'incendio.

GAMMA

La serie è composta da 9 grandezze, con portate: da 2.500 a 48.000 mc/h.

COSTRUZIONE

- Cassonatura smontabile in lamiera di acciaio zincata.
- Girante a doppia aspirazione, realizzata in lamiera zincata con pale curve in avanti (sirocco).
- Trasmissione con supporti autoallineanti esterna al flusso.
- Piastra porta motore regolabile in altezza per il tensionamento della cinghia.
- Motore asincrono trifase, grado di protezione IP 55, isolamento classe F, singola polarità, idoneo a servizio S1, forma B3, costruzione a norme IEC/EEC (UNEL MEC).
- Esecuzione 12; accoppiamento a trasmissione con motore posizionato lateralmente su un basamento comune.
- Staffe di fissaggio e appoggio.

SPECIFICHE TECNICHE

BD-BOX-HT

- Aria convogliata: max 150°C in servizio S1.
- 400°C per 120 min in servizio S2 (emergenza incendio).
- Tensione e frequenza d'alimentazione
 - trifase (T) 400V-50 Hz.

A RICHIESTA

- Versione con motore a doppia polarità.
- Tronchetto con rete (OG-BDHT).
- Tettuccio (RC-BDHT).
- Giunto antivibrante premente (OFC-BDHT).
- Giunto antivibrante aspirante (IFC-BDHT).
- Interruttore di servizio (SW-HT).

APPLICATIONS

The BD-BOX-HT line is destined to plants requiring the evacuation of fire smokes in environments like underground car parks, shopping malls, hospitals, schools, theatres, museums, etc.

This series is designed and manufactured according to the European directive EN 12101-3 obtaining the certification by an Autonomous Qualified Certification Institute. BD-BOX-HT are suitable to convey clean air and non dusty smokes up to the maximum temperature of 150°C in continuous service or in case of fire emergency at the temperature of 400°C for 120 minutes (F400).

For installation outside the fire compartment.

RANGE

The line consists of 9 sizes from 2.500 up to 48.000 mc/h.

CONSTRUCTION

- Dismountable cabinet in galvanized steel sheet.
- Double inlet impeller with forward curved blades (sirocco) in galvanized steel sheet.
- Belt coupling with self aligning supports, outside the airflow.
- Height adjustable motor support plate for the tensioning of the belt.
- Asynchronous three-phase motor, IP 55 mechanical protection, insulation class F, single polarity, suitable for S1 service, mounting type B3, construction according to IEC/EEC (UNEL MEC).
- Arrangement 12; belt coupling with motor placed aside on a common basement.
- Fixing brackets.

TECHNICAL SPECIFICATIONS

BD-BOX-HT

- Conveyed air: max 150°C in S1 service.
- 400°C for 120 min in S2 service (fire emergency).
- Voltage and frequency:
 - three-phase (T) 400V-50 Hz.

ON REQUEST

- Version with double polarity motor.
- Outlet with grid (OG-BDHT).
- Rain cover (RC-BDHT).
- Outlet flexible joint (OFC-BDHT).
- Inlet flexible joint (IFC-BDHT).
- Service switch (SW-HT).

Le prestazioni indicate nei diagrammi si riferiscono ad aria alla temperatura di 15°C ed all'altitudine di 0 mt s.l.m. , e sono state ottenute in installazioni di tipo "D" in assenza di reti e accessori.

Performances shown in the selection diagrams refer to air at 15°C temperature and 0 mt a.s.l. altitude, and they were obtained in installation type "D" with no grid nor accessories.

Modello Model	Ps mm H ₂ O	10	15	20	25	30	35	40	45	50	55	60	65	70
	Portata Flow rate (m ³ /h)	kW Rpm / LW dB(A)												
9/9	2.500	0,25 861/57	0,37 971/58	0,37 1072/58	0,55 1167/59	0,55 1255/60	0,55 1340/61	0,75 1420/61	0,75 1498/62	0,75 1573/63	1,1 1645/63	1,1 1716/64	1,1 1785/64	1,1 1852/65
	3.000	0,37 946/61	0,55 1045/61	0,55 1137/61	0,55 1224/62	0,75 1306/63	0,75 1385/63	0,75 1460/64	1,1 1532/64	1,1 1602/65	1,1 1670/65	1,1 1736/66	1,1 1800/66	1,5 1863/66
	3.500	0,55 1040/64	0,75 1128/64	0,75 1212/64	0,75 1292/65	1,1 1369/65	1,1 1442/65	1,1 1442/65	1,1 1580/66	1,1 1646/67	1,5 1710/67	1,5 1772/67	1,5 1833/68	1,5 1892/68
	4.000	0,75 1139/67	1,1 1219/67	1,1 1296/67	1,1 1369/67	1,1 1440/67	1,1 1509/68	1,1 1575/68	1,5 1639/68	1,5 1701/69	1,5 1762/69	1,5 1820/69	-	-
	4.500	1,1 1244/70	1,1 1315/70	1,5 1385/69	1,5 1456/69	1,5 1519/70	1,5 1583/70	-	-	-	-	-	-	-
10/10	3.000	0,37 716/59	0,37 809/59	0,55 896/60	0,55 977/61	0,75 1054/62	0,75 1128/63	0,75 1199/63	1,1 1267/64	1,1 1334/65	1,1 1299/65	1,1 1463/66	1,5 1526/66	1,5 1587/67
	4.000	0,75 836/65	0,75 913/65	0,75 987/65	1,1 1057/65	1,1 1123/66	1,1 1187/66	1,5 1249/67	1,5 1309/67	1,5 1367/68	1,5 1424/68	1,5 1479/69	2,2 1533/69	2,2 1586/69
	5.000	1,1 973/70	1,1 1037/69	1,5 1100/69	1,5 1161/70	1,5 1219/70	2,2 1276/70	2,2 1331/70	2,2 1384/71	2,2 1436/71	2,2 1487/71	2,2 1537/71	-	-
	5.500	1,5 1045/72	1,5 1104/72	1,5 1162/71	2,2 1219/72	2,2 1274/72	2,2 1327/72	2,2 1379/72	2,2 1430/72	-	-	-	-	-
12/12	4.000	0,37 586/58	0,55 681/59	0,55 769/61	0,75 850/62	1,1 928/63	1,1 1001/64	1,1 1072/65	1,5 1140/66	1,5 1206/67	1,5 1270/67	2,2 1332/68	2,2 1392/69	2,2 1452/70
	5.000	0,55 641/61	0,75 723/62	0,75 800/63	1,1 874/64	1,1 944/65	1,5 1011/66	1,5 1075/67	1,5 1137/68	2,2 1197/68	2,2 1255/69	2,2 1312/69	2,2 1368/70	2,2 1422/71
	6.000	1,1 706/65	1,1 777/65	1,1 846/66	1,5 912/67	1,5 975/67	2,2 1037/68	2,2 1096/69	2,2 1153/69	2,2 1208/70	2,2 1262/70	3,0 1315/71	3,0 1366/71	3,0 1417/72
	7.000	1,5 779/68	1,5 841/68	2,2 902/69	2,2 961/69	2,2 1019/70	2,2 1075/70	2,2 1129/71	3,0 1182/71	3,0 1233/72	3,0 1284/72	3,0 1333/73	-	-
15/15	6.000	0,55 484/60	0,75 559/62	1,1 627/63	1,1 692/64	1,5 753/65	1,5 812/66	2,2 869/67	2,2 923/68	2,2 977/69	2,2 1029/70	2,2 1080/71	3,0 1130/71	3,0 1179/72
	7.000	0,75 515/65	1,1 583/64	1,1 646/65	1,5 706/66	1,5 763/67	2,2 818/68	2,2 870/69	2,2 921/69	3,0 971/70	3,0 1019/70	3,0 1066/72	3,0 1122/72	4,0 1157/73
	8.000	1,1 550/66	1,5 612/66	1,5 671/67	2,2 727/68	2,2 780/69	2,2 831/69	2,2 880/70	3,0 928/71	3,0 974/71	3,0 1019/72	4,0 1063/72	4,0 1107/73	4,0 1149/74
	9.000	1,5 587/68	2,2 645/68	2,2 700/69	2,2 752/70	2,2 802/70	3,0 850/71	3,0 896/71	3,0 941/72	4,0 985/73	4,0 1027/73	4,0 1069/74	4,0 1110/74	4,0 1150/75
	10.000	2,2 628/70	2,2 645/68	2,2 731/71	3,0 780/71	3,0 827/72	3,0 873/72	4,0 917/73	4,0 959/73	4,0 1000/74	4,0 1041/74	4,0 1081/75	-	-
	11.000	3,0 670/72	3,0 718/72	3,0 766/73	3,0 812/73	4,0 856/73	4,0 899/74	4,0 941/74	4,0 981/75	4,0 1002/75	-	-	-	-
18/18	9.000	1,1 422/63	1,1 482/64	1,5 538/65	1,5 591/66	2,2 641/67	2,2 690/69	2,2 738/69	3,0 785/70	3,0 830/71	3,0 875/72	4,0 920/73	4,0 963/73	-
	10.000	1,1 442/65	1,5 498/66	1,5 551/67	2,2 600/68	2,2 648/69	2,2 694/69	3,0 739/70	3,0 783/71	3,0 825/72	4,0 867/73	4,0 908/73	4,0 949/74	5,5 989/74
	11.000	1,5 463/66	1,5 516/67	2,2 566/68	2,2 613/69	2,2 658/70	3,0 702/70	3,0 744/71	4,0 785/72	4,0 826/73	4,0 865/73	4,0 904/74	5,5 942/74	5,5 980/75
	12.000	1,5 486/68	2,2 536/69	2,2 583/69	3,0 628/70	3,0 671/71	3,0 712/71	4,0 753/72	4,0 792/73	4,0 830/73	4,0 868/74	5,5 904/74	5,5 941/75	5,5 976/76
	13.000	2,2 510/70	2,2 557/70	3,0 602/71	3,0 644/71	3,0 685/72	4,0 725/73	4,0 764/73	4,0 801/74	4,0 838/74	5,5 873/75	5,5 909/75	5,5 943/76	5,5 977/76
	14.000	2,2 535/71	3,0 579/72	3,0 622/72	3,0 663/73	4,0 702/73	4,0 740/74	4,0 777/74	5,5 813/75	5,5 848/75	5,5 882/76	5,5 916/76	5,5 949/76	-
	15.000	3,0 560/73	3,0 603/73	4,0 643/73	4,0 682/74	4,0 719/74	5,5 756/75	5,5 791/75	5,5 826/75	5,5 860/76	5,5 893/76	-	-	-
20/20	12.000	2,2 415/66	2,2 460/67	2,2 503/67	2,2 543/68	3,0 581/68	3,0 618/69	3,0 654/70	4,0 688/70	4,0 722/71	4,0 755/72	4,0 787/72	5,5 819/73	-
	13.000	2,2 434/68	2,2 477/68	2,2 517/68	2,2 556/69	3,0 593/70	3,0 628/70	3,0 662/71	4,0 695/71	4,0 728/72	4,0 759/72	5,5 790/73	5,5 820/73	-
	14.000	2,2 454/69	2,2 495/70	2,2 533/70	3,0 570/70	3,0 606/71	3,0 640/71	4,0 673/72	4,0 705/72	4,0 736/73	5,5 766/73	5,5 796/74	5,5 825/74	-
	15.000	2,2 475/71	2,2 514/71	3,0 550/71	3,0 586/71	3,0 620/72	4,0 653/72	4,0 684/73	4,0 715/73	5,5 745/74	5,5 774/74	5,5 803/74	5,5 831/75	-
	16.000	3,0 496/73	3,0 533/72	3,0 568/72	4,0 602/73	4,0 635/73	4,0 667/73	4,0 697/74	5,5 727/74	5,5 756/74	5,5 784/75	5,5 812/75	7,5 839/76	-
	18.000	4,0 541/75	4,0 574/75	4,0 606/75	4,0 637/75	5,5 668/75	5,5 697/75	5,5 726/76	5,5 754/76	5,5 781/76	7,5 808/76	7,5 834/77	-	-
	20.000	4,0 587/78	5,5 617/77	5,5 646/77	5,5 675/77	5,5 703/77	5,5 731/77	7,5 758/78	7,5 784/78	7,5 810/78	7,5 835/78	-	-	-

Il livello di potenza sonora LW dB(A) è rilevato all'esterno del box con le bocche canalizzate ed in campo libero.

ATTENZIONE: Il livello Pressione Sonora Lp dB(A) a m 1 è deducibile, con approssimazione, sottraendo 7 dB per una installazione in ambienti riverberanti ed 11 dB in campo libero.

TOLLERANZE: prestazioni aeruliche e rumorosità rientrano nelle tolleranze indicate nella norma DIN 24166, Classe 2

The sound power level LW dB(A) is measured in free field outside the fan with inlet and outlet connected to ducts.

ATTENTION: The Sound Pressure Level Lp dB(A) 1 m is deducted, with approximation, subtrahend 7 dB for installation in riverberating room and 11 dB in free field.

TOLERANCES: performances and sound power levels within the tolerances allowed by the DIN 24166 standard for Class 2.

BD-BOX-HT

PRESTAZIONI - PERFORMANCES

1 Mm H₂O= 9,8 Pa

Le prestazioni indicate nei diagrammi si riferiscono ad aria alla temperatura di 15°C ed all'altitudine di 0 mt s.l.m. , e sono state ottenute in installazioni di tipo "D" in assenza di reti e accessori.

Performances shown in the selection diagrams refer to air at 15°C temperature and 0 mt a.s.l. altitude, and they were obtained in installation type "D" with no grid nor accessories.

Modello Model	Ps mm H ₂ O Portata Flow rate (m ³ /h)	10	15	20	25	30	35	40	45	50	55	60	65	70
		kW Rpm / LW dB(A)												
22/22	16.000	2,2 398/70	2,2 436/70	3,0 473/70	3,0 508/71	4,0 532/71	4,0 575/72	4,0 606/73	5,5 637/73	5,5 667/74	5,5 696/74	5,5 725/75	7,5 753/75	7,5 781/76
	18.000	3,0 429/73	3,0 463/72	4,0 497/73	4,0 530/73	4,0 561/73	5,5 592/74	5,5 622/74	5,5 651/75	5,5 679/75	7,5 706/76	7,5 733/76	7,5 759/76	7,5 785/77
	20.000	4,0 462/493	4,0 493/75	4,0 524/75	4,0 554/75	5,5 584/75	5,5 612/75	5,5 640/76	7,5 668/76	7,5 694/77	7,5 720/77	7,5 745/77	7,5 770/78	11 795/78
	22.000	4,0 497/78	5,5 525/77	5,5 553/77	5,5 581/77	5,5 608/77	7,5 635/77	7,5 662/77	7,5 687/78	7,5 712/78	11 737/78	11 761/79	11 785/79	-
	24.000	5,5 535/80	5,5 558/79	7,5 583/79	7,5 609/79	7,5 635/79	7,5 660/79	7,5 685/79	11 709/79	11 733/79	11 756/80	11 779/80	-	-
	26.000	7,5 570/82	7,5 592/81	7,5 615/81	7,5 639/81	11 663/80	11 687/81	11 710/81	11 733/81	11 756/81	11 778/81	11 800/81	-	-
25/25	20.000	2,2 302/68	2,2 342/69	3,0 380/70	4,0 415/71	4,0 449/72	4,0 482/72	5,5 514/73	5,5 545/74	7,5 575/75	-	-	-	-
	22.000	2,2 316/69	3,0 354/70	4,0 389/71	4,0 423/72	4,0 455/73	5,5 486/73	5,5 516/74	5,5 546/75	7,5 575/76	-	-	-	-
	24.000	3,0 331/71	4,0 366/72	4,0 400/72	4,0 432/73	5,5 463/74	5,5 492/74	5,5 521/75	7,5 549/76	7,5 576/76	-	-	-	-
	26.000	4,0 347/73	4,0 380/73	5,5 412/74	5,5 442/74	5,5 472/75	7,5 500/75	7,5 528/76	7,5 554/77	7,5 580/77	-	-	-	-
	28.000	4,0 363/74	5,5 395/75	5,5 425/75	5,5 454/76	7,5 482/76	7,5 509/77	7,5 536/77	7,5 561/78	7,5 586/78	-	-	-	-
	30.000	5,5 380/76	5,5 410/76	5,5 439/76	7,5 467/77	7,5 493/77	7,5 519/78	11 545/78	11 569/78	11 593/79	-	-	-	-
	32.000	5,5 398/77	7,5 426/77	7,5 453/78	7,5 480/78	7,5 506/78	11 531/79	11 555/79	11 579/79	-	-	-	-	-
	35.000	7,5 425/79	7,5 451/79	11 476/79	11 501/80	11 525/80	11 549/80	11 572/80	11 594/81	-	-	-	-	-
30/28	27.000	2,2 243/68	3,0 277/69	4,0 309/70	4,0 338/71	5,5 367/72	5,5 394/73	5,5 420/74	7,5 445/75	7,5 469/75	7,5 493/76	11 516/77	11 539/77	-
	30.000	3,0 255/70	4,0 287/71	4,0 316/72	5,5 345/73	5,5 371/73	5,5 397/74	7,5 422/75	7,5 446/76	7,5 469/76	11 492/77	11 514/77	11 536/78	-
	33.000	4,0 269/72	4,0 298/73	5,5 326/73	5,5 352/74	7,5 378/75	7,5 402/75	7,5 426/76	11 449/77	11 471/77	11 493/78	11 514/78	11 535/79	-
	36.000	4,0 283/74	5,5 310/74	5,5 336/75	7,5 361/75	7,5 386/76	7,5 409/76	11 432/77	11 453/78	11 475/78	11 496/79	11 516/79	15 536/80	-
	39.000	5,5 297/76	5,5 323/76	7,5 344/77	7,5 371/77	11 394/77	11 417/78	11 438/78	11 459/79	11 480/79	15 500/80	15 520/80	15 539/80	-
	42.000	7,5 313/77	7,5 336/77	7,5 359/78	11 382/78	11 404/78	11 426/79	11 446/79	15 467/80	15 486/80	15 506/80	15 524/81	15 543/81	-
	45.000	7,5 329/79	11 350/79	11 372/79	11 394/79	11 415/80	11 435/80	15 455/80	15 475/81	15 494/81	15 512/81	15 530/82	-	-
	48.000	11 345/80	11 365/80	11 386/80	11 406/80	15 426/81	15 446/81	15 465/81	15 485/82	15 502/82	-	-	-	-

Il livello di potenza sonora LW dB(A) è rilevato all'esterno del box con le bocche canalizzate ed in campo libero.

ATTENZIONE: Il livello Pressione Sonora Lp dB(A) a m 1 è deducibile, con approssimazione, sottraendo 7 dB per una installazione in ambienti riverberanti ed 11 dB in campo libero.

TOLLERANZE: prestazioni aerauliche e rumorosità rientrano nelle tolleranze indicate nella norma DIN 24166, Classe 2

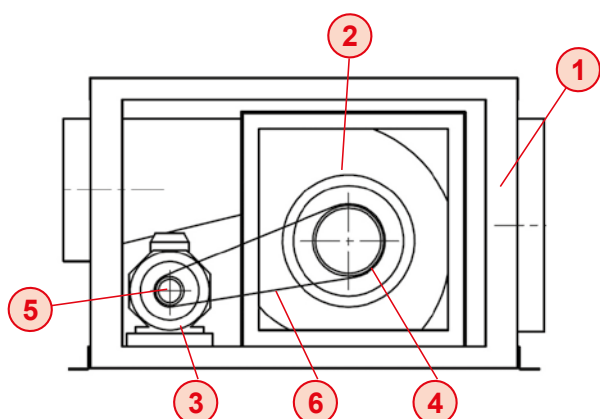
The sound power level LW dB(A) is measured in free field outside the fan with inlet and outlet connected to ducts.

ATTENTION: The Sound Pressure Level Lp dB(A) 1 m is deduced, with approximation, subtrahend 7 dB for installation in riverberating room and 11 dB in free field.

TOLERANCES: performances and sound power levels within the tolerances allowed by the DIN 24166 standard for Class 2.

BD-BOX-HT

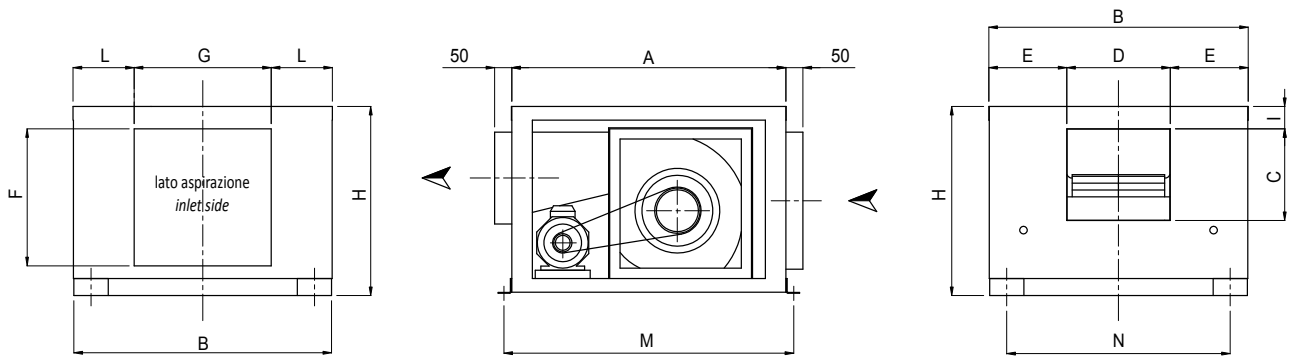
PARTI DI RICAMBIO - SPARE PARTS



- 1 Struttura - Cabinet
- 2 Ventilatore - Fan
- 3 Motore - Motor
- 4 Puleggia Ventilatore - Fan Pulley
- 5 Puleggia Motore - Motor Pulley
- 6 Cinghia - Belt

BD-BOX-HT

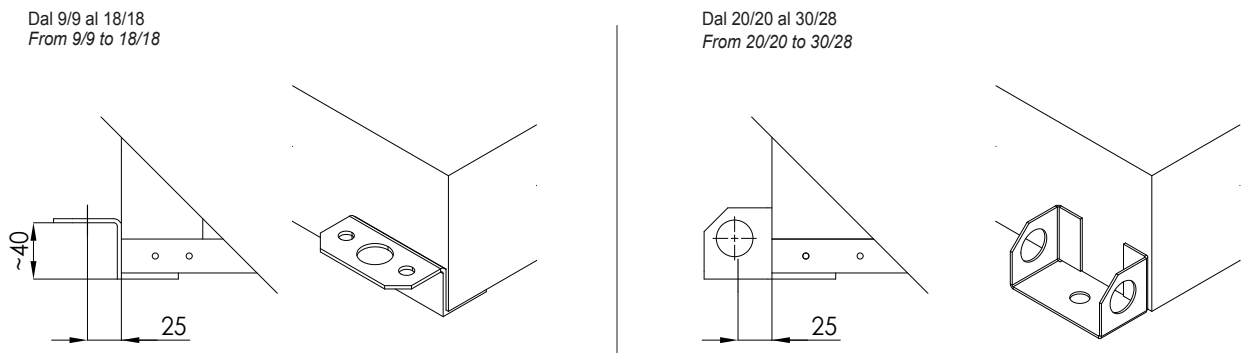
DIMENSIONI - DIMENSIONS



Modello Model	A	B	H	C	D	I	E	F	G	L	M	N	Kg min-max
9/9	800	755	540	268	302	65	226,5	400	400	177,5	850	715	83-100
10/10	920	810	590	293	330	65	240	450	450	180	970	770	95-120
12/12	1010	940	635	345	390	70	275	500	500	220	1060	900	121-149
15/15	1120	1105	735	407	477	80	314	600	600	252,5	1170	1065	161-197
18/18	1265	1290	850	483	560	65	365	700	700	295	1315	1290	208-256
20/20	1415	1405	1065	610	607	85	399	800	800	302,5	1465	1305	339-386
22/22	1650	1520	1150	698	660	85	430	900	900	310	1700	1420	389-495
25/25	1770	1710	1270	800	770	85	470	1000	1000	355	1820	1610	458-564
30/28	2025	1960	1505	939	895	85	532,5	1200	1200	380	2075	1860	577-706

Tolleranze dimensionali ± 5 mm - Dimensional tolerances ± 5 mm

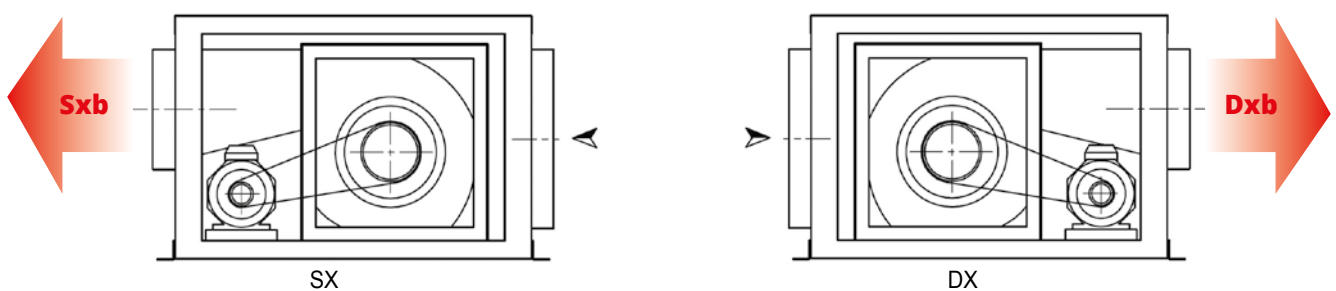
Dettaglio piede BD-BOX-HT



Flusso d'aria standard Sxb - Standard discharge Sxb

BD-BOX-HT

ORIENTAMENTI - DISCHARGE ANGLES



Vista lato ispezione - Sight inspection side