

Main motors

Dimensional drawings

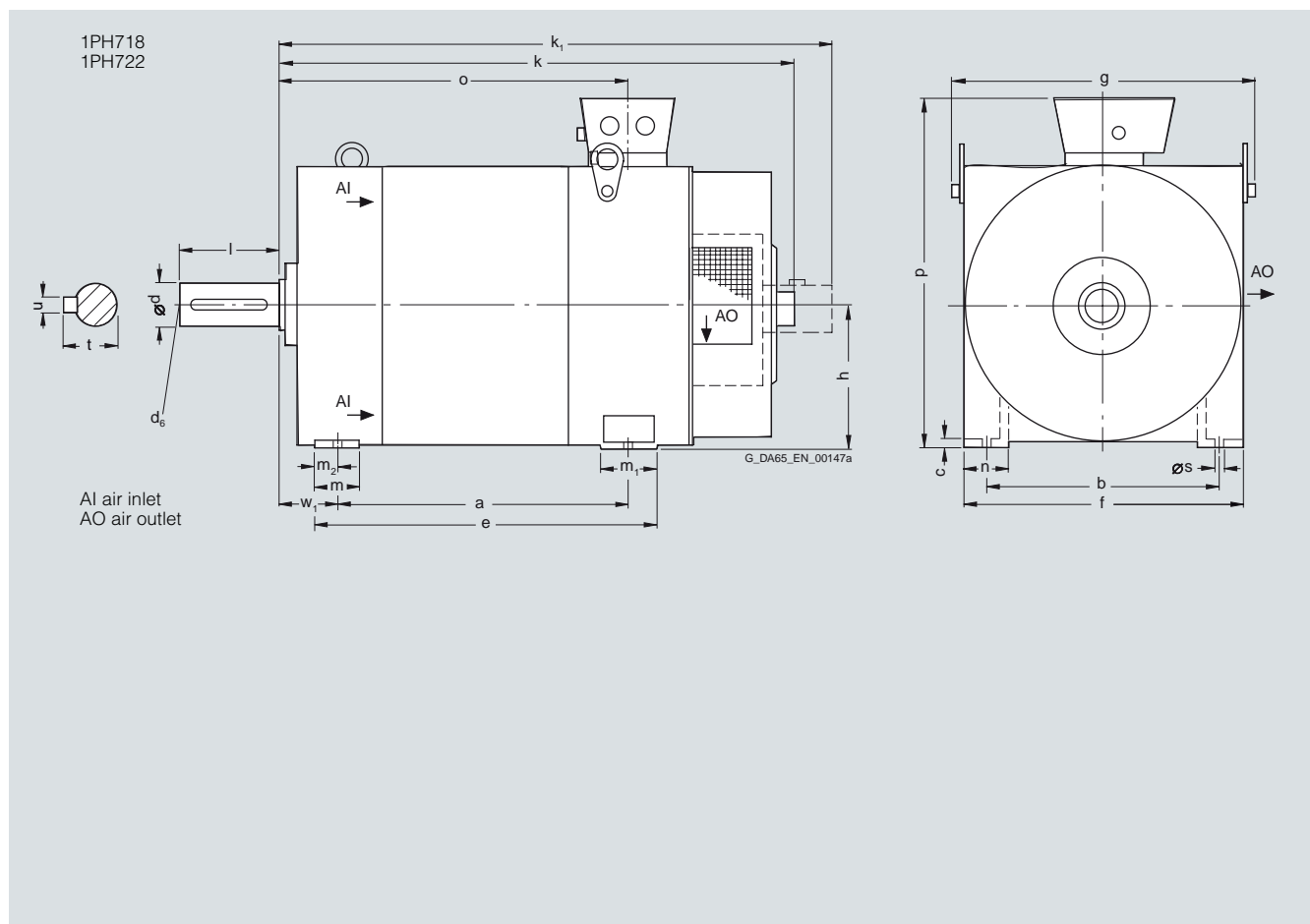
1PH7 asynchronous motors Forced ventilation

Dimensional drawings

Shaft height	Type	DIN IEC	Dimensions in mm (inches)														Terminal box type 1XB7...		
			a B	b A	c LA	e M	f AB	g AC	h H	k LB	k ₁	m BA	m ₁	m ₂	n AA	o	p ¹⁾ HD	p ¹⁾ HD	p ¹⁾ HD
1PH7, type of construction IM B3, forced ventilation, direction of air flow DE → NDE																			
180	1PH7184		430 (16.93)	279 (10.98)	14 (0.55)	510 (20.08)	360 (14.17)	408 (16.06)	180 (7.09)	835 (32.87)	-	60 (2.36)	120 (4.72)	35 (1.38)	65 (2.56)	541 (21.30)	495 (19.49)	-	-
	1PH7186		520 (20.47)			600 (23.62)				925 (36.42)						631 (24.84)	545 (21.46)	-	-
225	1PH7224		445 (17.52)	356 (14.02)	18 (0.71)	530 (20.87)	450 (17.72)	498 (19.61)	225 (8.86)	-	1100 (43.31)	60 (2.36)	120 (4.72)	40 (1.57)	85 (3.35)	629 (24.76)	595 (23.43)	645 (25.39)	680 (26.77)
	1PH7226		545 (21.46)			630 (24.80)				1200 (47.24)					729 (28.70)				
	1PH7228		635 (25.00)			720 (28.35)				1290 (50.79)					819 (32.24)		-		

Shaft extension DE

Shaft height	Type	DIN IEC	s K	w ₁ C	d D	d ₆	l E	t GA	u F
180	1PH7184		14.5 (0.57)	121 (4.76)	60 (2.36)	M20	140 (5.51)	64 (2.52)	18 (0.71)
	1PH7186				65 (2.56)			69 (2.72)	
225	1PH7224		18.5 (0.73)	149 (5.87)	75 (2.95)	M20	140 (5.51)	79.5 (3.13)	20 (0.79)
	1PH7226								
	1PH7228								



¹⁾ Maximum dimensions, depending on electrical version (terminal box).

Main motors

Dimensional drawings

1PH7 asynchronous motors

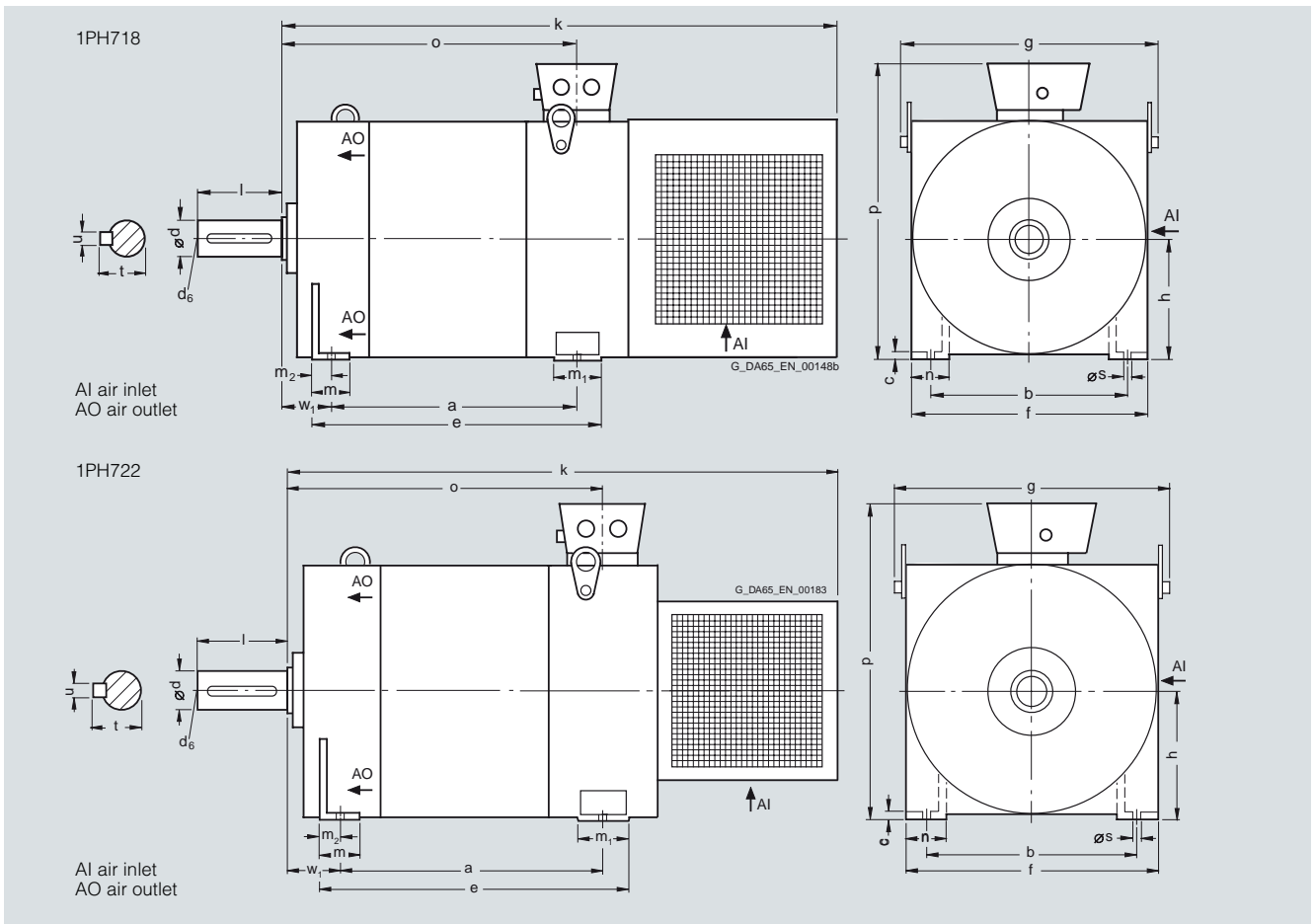
Forced ventilation

Dimensional drawings

For motor		Dimensions in mm (inches)															Terminal box type 1XB7...		
Shaft height	Type	DIN IEC	a B	b A	c LA	e M	f AB	g AC	h H	k LB	m BA	m ₁ -	m ₂ -	n AA	o -	322	422	700	
																p ¹⁾ HD	p ¹⁾ HD	p ¹⁾ HD	
1PH7, type of construction IM B3, forced ventilation, direction of air flow NDE → DE																			
180	1PH7184		430 (16.93)	279 (10.98)	14 (0.55)	510 (20.08)	360 (14.17)	405 (15.94)	180 (7.09)	1010 (39.76)	60 (2.36)	120 (4.72)	35 (1.38)	65 (2.56)	541 (21.30)	495 (19.49)	-	-	
	1PH7186		520 (20.47)			600 (23.62)				1100 (43.31)					631 (24.84)	560 (22.05)			
225	1PH7224		445 (17.52)	356 (14.02)	18 (0.71)	530 (20.87)	450 (17.72)	498 (19.61)	225 (8.86)	1090 (42.91)	60 (2.36)	120 (4.72)	40 (1.57)	85 (3.35)	629 (24.76)	595 (23.43)	645 (25.93)	680 (26.77)	
	1PH7226		545 (21.46)			630 (24.80)				1190 (46.85)					729 (28.70)				
	1PH7228		635 (25.00)			720 (28.35)				1280 (50.39)					819 (32.24)				

Shaft extension DE

Shaft height	Type	DIN IEC	s K	w ₁ C	d D	d ₆ -	l E	t GA	u F
180	1PH7184		14.5 (0.57)	121 (4.76)	60 (2.36)	M20	140 (5.51)	64 (2.52)	18 (0.71)
	1PH7186				65 (2.56)			69 (2.72)	
225	1PH7224		18.5 (0.73)	149 (5.87)	75 (2.95)	M20	140 (5.51)	79.5 (3.13)	20 (0.79)
	1PH7226								
	1PH7228								



¹⁾ Maximum dimensions, depending on electrical version (terminal box).

Main motors

Dimensional drawings

1PH7 asynchronous motors Forced ventilation

Dimensional drawings

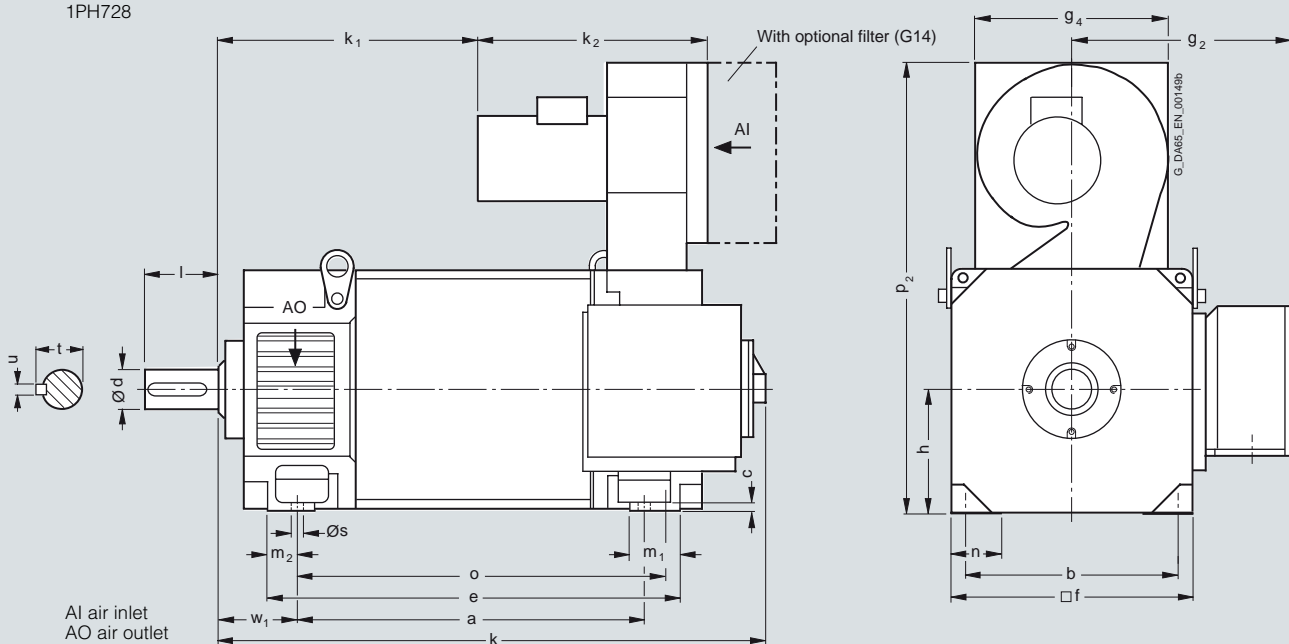
For motor Dimensions in mm (inches)

Shaft height	Type	DIN IEC	a B	b A	c HA	e BB	f AB	g ₂ AD	g ₄ -	h H	k LB	k ₁ -	k ₂ -	m ₁ -	m ₂ -	n AA	o -	p ₂ -	
1PH7, type of construction IM B3, forced ventilation, direction of air flow NDE → DE																			
280	1PH7284		684 (26.93)	457 (17.99)	22 (0.87)	840 (33.07)	560 (22.05)	518 (20.39)	449 (17.68)	280 (11.02)	1146 (45.12)	489 (19.25)	546 (21.50)	108 (4.25)	78 (3.07)	100 (3.94)	731 (28.78)	1042 (41.02)	
	1PH7286		794 (31.26)			950 (37.40)					1256 (49.45)	599 (23.58)						841 (33.11)	
	1PH7288		924 (36.38)			1080 (42.52)					1386 (54.57)	729 (28.70)						971 (38.23)	

Shaft extension
DE

Shaft height	Type	DIN IEC	s K	w ₁ C	d D	l E	t GA	u F
280	1PH7284		24 (0.94)	190 (7.48)	95 (3.74)	170 (6.69)	100 (3.94)	25 (0.98)
	1PH7286							
	1PH7288							

1PH728



Main motors

Dimensional drawings

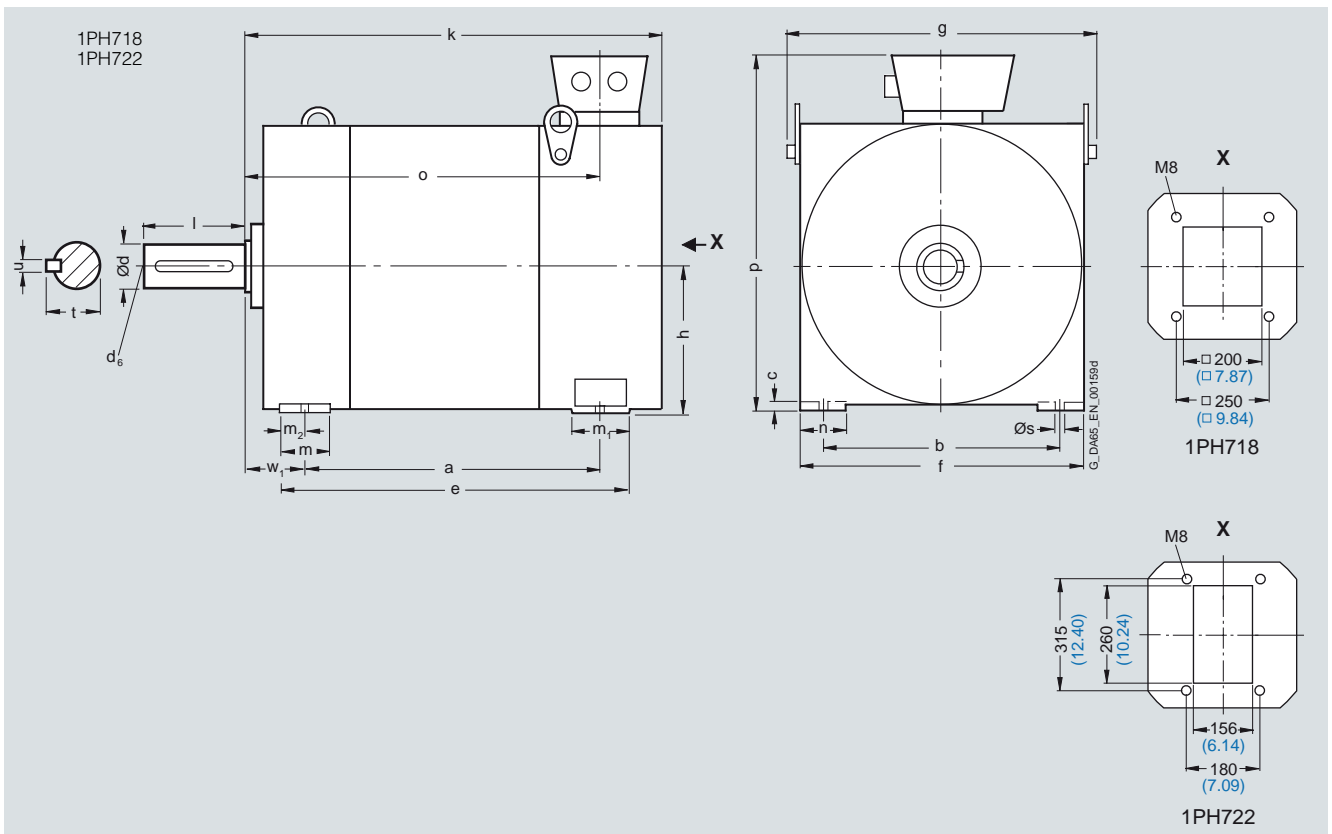
1PH7 asynchronous motors Forced ventilation

Dimensional drawings

For motor		Dimensions in mm (inches)														Terminal box type 1XB7...		
Shaft height	Type	DIN IEC	a	b	c	e	f	g	h	k	m	m ₁	m ₂	n	o	322	422	700
			B	A	LA	M	AB	AC	H	LB	BA	-	-	AA	-	p ¹⁾ HD	p ¹⁾ HD	p ¹⁾ HD
1PH7, type of construction IM B3, forced ventilation, with pipe connection at NDE																		
180	1PH7184		430 (16.93)	279 (10.98)	14 (0.55)	510 (20.08)	360 (14.17)	408 (16.06)	180 (7.09)	830 (32.68)	60 (2.36)	120 (4.72)	35 (1.38)	65 (2.56)	541 (21.30)	495 (19.49)	-	-
	1PH7186		520 (20.47)			600 (23.62)				920 (36.22)					631 (24.84)	560 (22.05)	-	-
225	1PH7224		445 (17.52)	356 (14.02)	18 (0.71)	530 (20.78)	450 (17.72)	498 (19.61)	225 (8.86)	950 (37.40)	60 (2.36)	120 (4.72)	40 (1.57)	80 (3.15)	629 (24.76)	595 (23.43)	645 (25.39)	680 (26.77)
	1PH7226		545 (21.46)			630 (24.80)				1050 (41.34)					729 (28.70)			
	1PH7228		635 (25.00)			720 (28.35)				1140 (44.88)					819 (32.24)		-	-

Shaft extension DE

Shaft height	Type	DIN IEC	s K	w ₁ C	d D	d ₆ -	l E	t GA	u F
180	1PH7184		14.5 (0.57)	121 (4.76)	60 (2.36)	M20	140 (5.51)	64 (2.52)	18 (0.71)
	1PH7186				65 (2.56)			69 (2.72)	
225	1PH7224		18.5 (0.73)	149 (5.87)	75 (2.95)	M20	140 (5.51)	79.5 (3.13)	20 (0.79)
	1PH7226								
	1PH7228								



¹⁾ Maximum dimensions, depending on electrical version (terminal box).

Main motors

Dimensional drawings

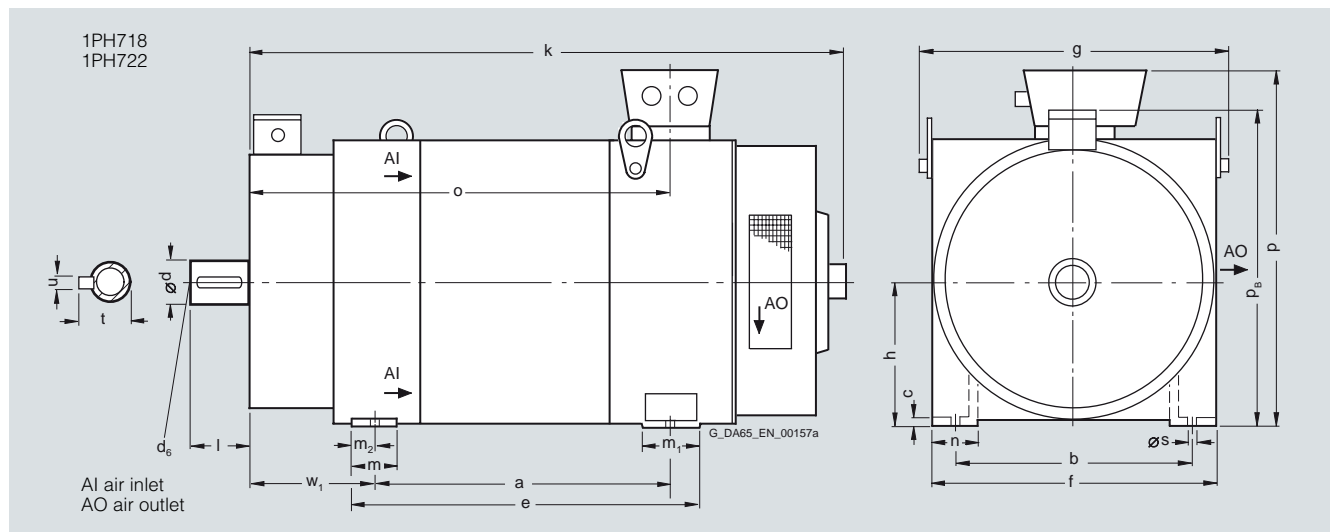
1PH7 asynchronous motors Forced ventilation

Dimensional drawings

Shaft height	Type	DIN IEC	Dimensions in mm (inches)														Terminal box type 1XB7...				
			a B	b A	c LA	e M	f AB	g AC	h H	k LB	m BA	m ₁	m ₂	n AA	o	p ¹⁾ HD	p ¹⁾ HD	p ¹⁾ HD			
1PH7, type of construction IM B3, forced ventilation, brake control module, direction of air flow DE → NDE																					
180	1PH7184		430 (16.93)	279 (10.98)	14 (0.55)	510 (20.08)	360 (14.17)	408 (16.06)	180 (7.09)	945 (37.20)	60 (2.36)	120 (4.72)	35 (1.38)	65 (2.56)	644 (25.35)	495 (19.49)	-	-			
	1PH7186		520 (20.47)			600 (23.62)				1035 (40.75)					734 (28.90)	560 (22.05)	-				
225	1PH7224		445 (17.52)	356 (14.02)	18 (0.71)	530 (20.87)	450 (17.72)	498 (19.61)	225 (8.86)	1230 (48.43)	60 (2.36)	120 (4.72)	40 (1.57)	80 (3.15)	758 (29.84)	595 (23.43)	645 (25.39)	680 (26.77)			
	1PH7226		545 (21.46)			630 (24.80)				1330 (52.36)				858 (33.78)							
	1PH7228		635 (25.00)			720 (28.35)				1420 (55.91)				948 (37.32)							

Shaft extension DE

Shaft height	Type	DIN IEC	p _B	s K	w ₁ C	d D	d ₆	l E	t GA	u F
180	1PH7184					90	M20	90	95	25
	1PH7186					(3.54)		(3.54)	(3.74)	(0.98)
225	1PH7224					100	M20	100	106	28
	1PH7226					(3.94)		(3.94)	(4.17)	(1.10)
	1PH7228									



¹⁾ Maximum dimensions, depending on electrical version (terminal box).

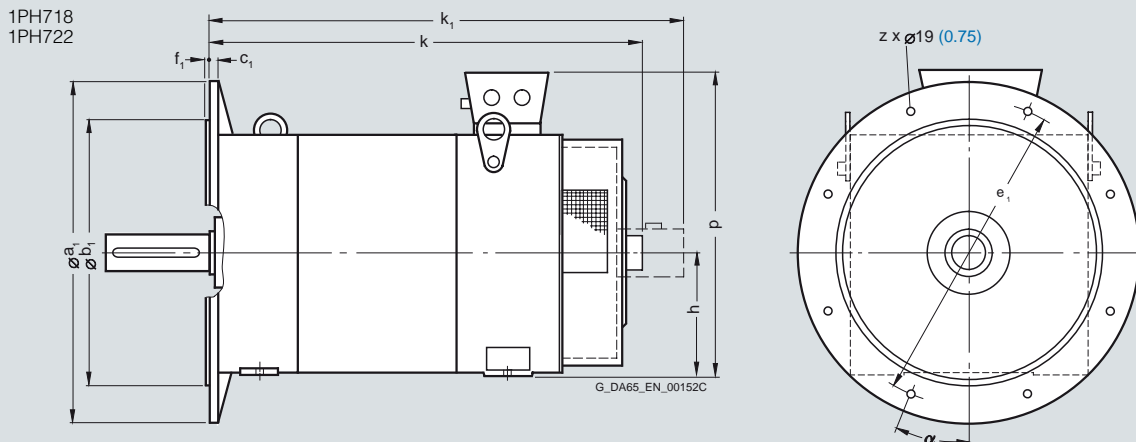
Main motors

Dimensional drawings

1PH7 asynchronous motors Forced ventilation

Dimensional drawings

For motor		Dimensions in mm (inches)										For dimensions for foot mounting, shaft and terminal box, see dimensional drawing of 1PH718/1PH722 motors, type of construction IM B3.			
Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f ₁ T	h H	k LB	k ₁ -	Terminal box type			z -	α -
											1XB7322	1XB7422	1XB7700		
1PH7, type of construction IM B35, forced ventilation, direction of air flow DE → NDE															
180	1PH7184 ²⁾		400 (15.75)	300 (11.81)	15 (0.59)	350 (13.78)	5 (0.20)	180 (7.09)	835 (32.87)	-	495 (19.49)	-	-	4	45°
	1PH7184 ²⁾		450 (17.72)	350 (13.78)	16 (0.63)	400 (15.75)			835 (32.87)			-	-	8	22.5°
	1PH7186								925 (36.42)			560 (22.05)	-		
225	1PH7224		550 (21.65)	450 (17.72)	18 (0.71)	500 (19.69)	5 (0.20)	225 (8.86)	-	1100 (43.31)	595 (23.43)	645 (25.39)	680 (26.77)	8	22.5°
	1PH7226									1200 (47.24)					
	1PH7228									1290 (50.79)		-			



¹⁾ Maximum dimensions, depending on electrical version (terminal box).

²⁾ For flange selection, see Order No. supplement for 1PH718/1PH722.

Main motors

Dimensional drawings

1PH7 asynchronous motors Forced ventilation

Dimensional drawings

For motor Dimensions in mm (inches)

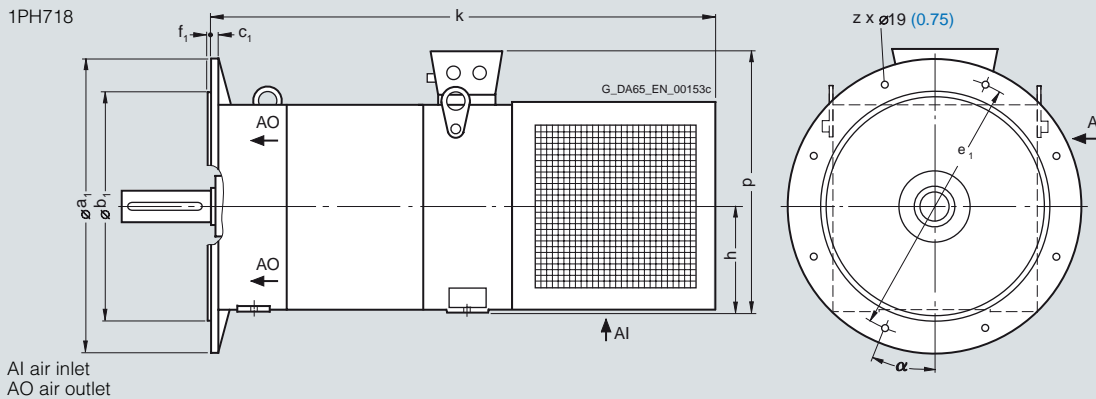
For dimensions for foot mounting, shaft and terminal box, see dimensional drawing of 1PH718/1PH722 motors, type of construction IM B3.

Terminal box type

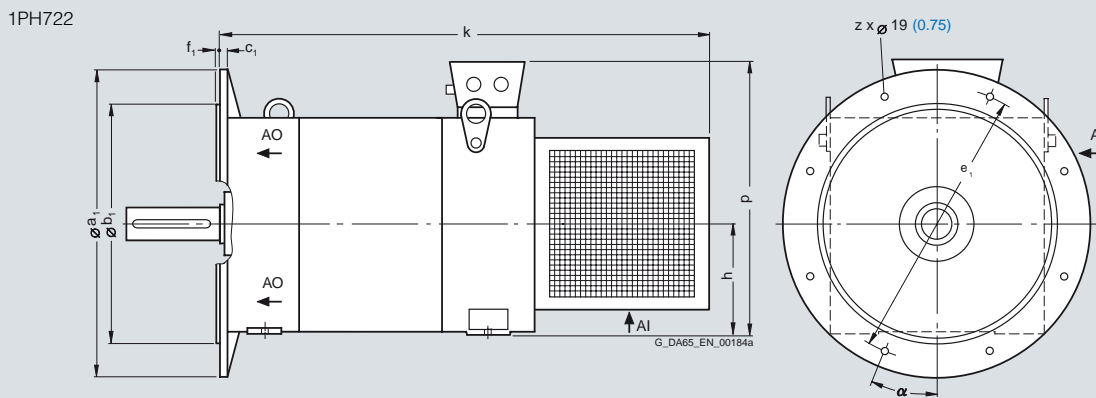
1XB7322 1XB7422 1XB7700

Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f ₁ T	h H	k LB	Terminal box type		z	α	
										p ¹⁾ HD	p ¹⁾ HD			
1PH7, type of construction IM B35, forced ventilation, direction of air flow NDE → DE														
180	1PH7184 ²⁾		400 (15.75)	300 (11.81)	15 (0.59)	350 (13.78)	5 (0.20)	180 (7.09)	1010 (39.76)	495 (19.49)	–	–	4	45°
	1PH7184 ²⁾		450 (17.72)	350 (13.78)	16 (0.63)	400 (15.75)			1010 (39.76)	–	–	8	22.5°	
	1PH7186								1100 (43.31)	560 (22.05)	–			
225	1PH7224		550 (21.65)	450 (17.72)	18 (0.71)	500 (19.69)	5 (0.20)	225 (8.86)	1090 (42.91)	595 (23.43)	645 (25.39)	680 (26.77)	8	22.5°
	1PH7226							1190 (46.85)						
	1PH7228							1280 (50.39)		–				

1PH718

AI air inlet
AO air outlet

1PH722

AI air inlet
AO air outlet

1) Maximum dimensions, depending on electrical version (terminal box).

2) For flange selection, see Order No. supplement for 1PH718/1PH722.

Main motors

Dimensional drawings

1PH7 asynchronous motors Forced ventilation

Dimensional drawings

For motor Dimensions in mm (inches) For dimensions for foot mounting, shaft and terminal box, see dimensional drawing of 1PH728 motors, type of construction IM B3.

Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f ₁ T	h H	i ₂ -	k LB	k ₁ -	k ₂ -	p ₂ -
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1PH7, type of construction IM B35, forced ventilation, direction of air flow NDE → DE

280	1PH7284		660 (25.98)	550 (21.65)	24 (0.94)	600 (23.62)	6 (0.24)	280 (11.02)	170 (6.69)	1146 (45.12)	489 (19.25)	546 (21.50)	1042 (41.02)
	1PH7286									1256 (49.45)	599 (23.58)		
	1PH7288									1386 (54.57)	729 (28.70)		

