

Asynchronous motors

Dimension drawings

1PH7 motors Forced ventilation

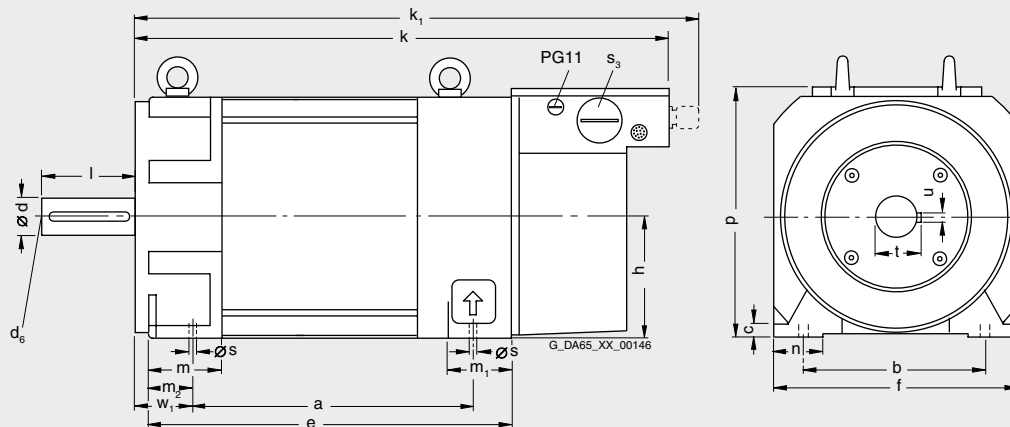
For motor		Dimensions in mm (in)																
Shaft height	Type	DIN IEC	a B	b A	c LA	e M	f AB	h H	k LB	k ₁ –	m BA	m ₁ –	m ₂ –	n AA	p HD	s K	s ₃ –	w ₁ C
1PH7, type IM B3, forced ventilation																		
100	1PH7101		202.5	160	11	263	196	100	411	434	52	64	27	39	220	12	PG29	40
	1PH7103		(7.97)	(6.30)	(0.43)	(10.35)	(7.72)	(3.94)	(16.18)	(17.09)	(2.05)	(2.52)	(1.06)	(1.54)	(8.66)	(0.47)		(1.57)
	1PH7105		297.5			358			506	529								
	1PH7107		(11.71)			(14.09)			(19.92)	(20.83)								
132	1PH7131		265.5	216	14	341	260	132	538	561	63	75	33	52	275	12	PG36	50
	1PH7133		(10.45)	(8.50)	(0.55)	(13.43)	(10.24)	(5.20)	(21.18)	(22.09)	(2.48)	(2.95)	(1.30)	(2.05)	(10.83)	(0.47)		(1.97)
	1PH7135		350.5			426			623	646								
	1PH7137		(13.80)			(16.77)			(24.53)	(25.43)								
160	1PH7163		346.5	254	17	438	314	160	640	663	78	81	42	62	330	14	PG42	64
	1PH7167		(13.64)	(10.00)	(0.67)	(17.24)	(12.36)	(6.30)	(25.20)	(26.10)	(3.07)	(3.19)	(1.65)	(2.44)	(12.99)	(0.55)		(2.52)
			406.5			498			700	723								
			(16.00)			(19.61)			(27.56)	(28.46)								

DE shaft extension

Shaft height	Type	DIN IEC	d D	d ₆ –	l E	t GA	u F
100	1PH7101		38	M12	80	41	10
	1PH7103		(1.50)		(3.15)	(1.61)	(0.39)
	1PH7105						
	1PH7107						
132	1PH7131		42	M16	110	45	12
	1PH7133		(1.65)		(4.33)	(1.77)	(0.47)
	1PH7135						
	1PH7137						
160	1PH7163		55	M20	110	59	16
	1PH7167		(2.17)		(4.33)	(2.32)	(0.63)

For deviating and additional dimensions for 1PH7 motors with DRIVE-CLiQ, see 1PH7 motors with DRIVE-CLiQ.

1PH710
1PH713
1PH716



Asynchronous motors

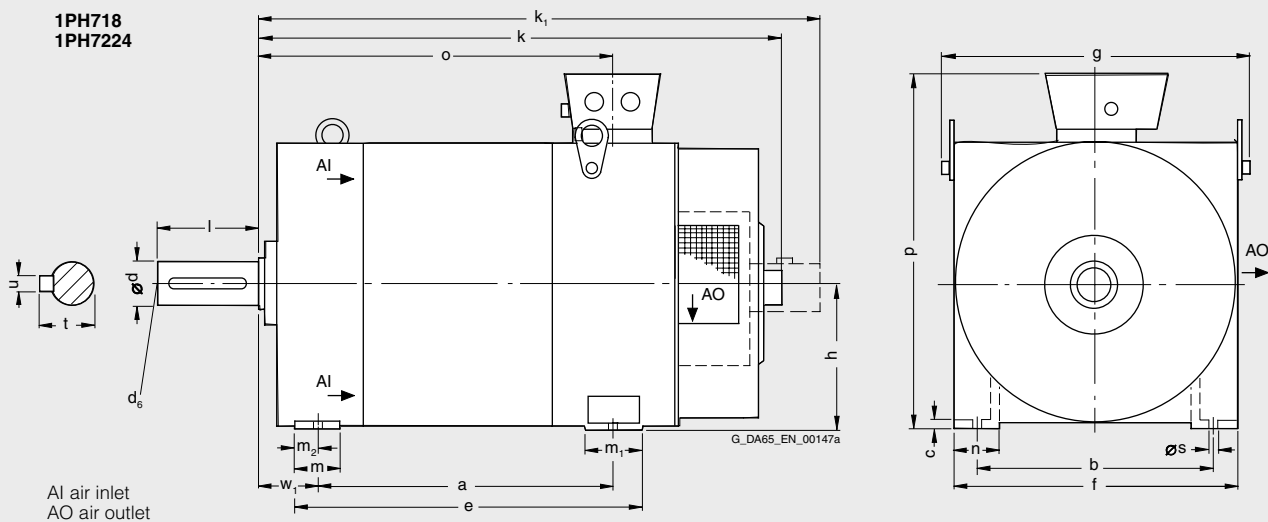
Dimension drawings

1PH7 motors Forced ventilation

For motor		Dimensions in mm (in)															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	k ₁ –	m BA	m ₁ –	m ₂ –	n AA	o –	...322 p ¹⁾ HD	...422 p ¹⁾ HD	...700 p ¹⁾ HD
1PH7, type 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 (16.09)	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)

DE shaft extension

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 (0.72)
	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)



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

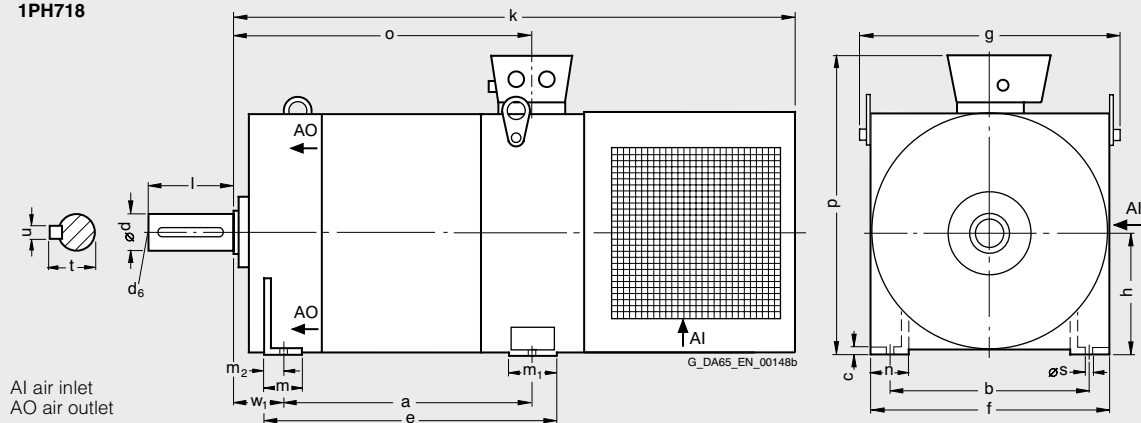
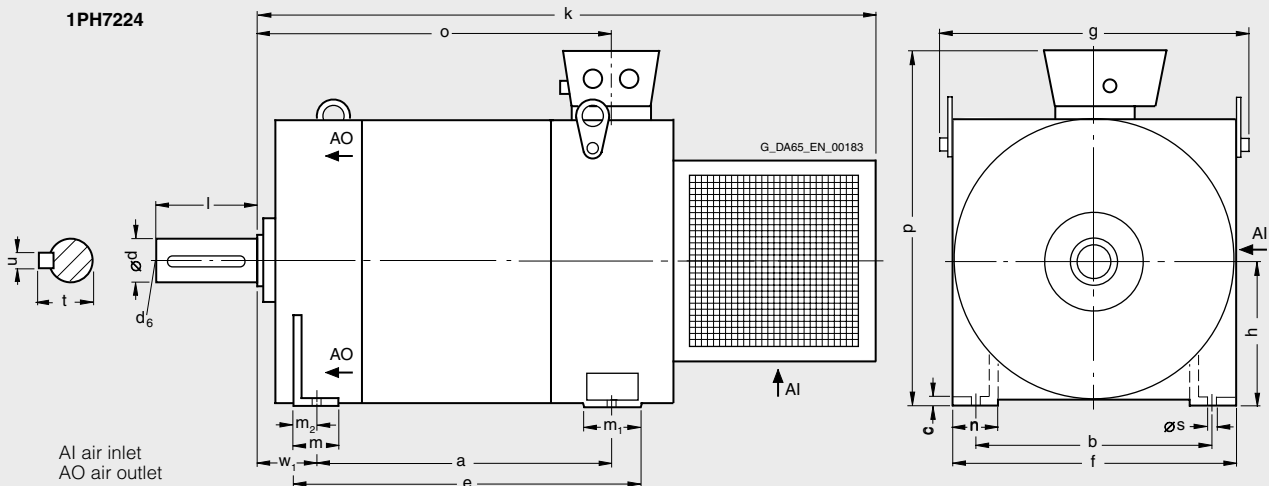
Asynchronous motors

Dimension drawings

1PH7 motors Forced ventilation

For motor		Dimensions in mm (in)														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 p ¹⁾ HD	...422 p ¹⁾ HD	...700 p ¹⁾ HD
1PH7, type 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 (25.39)	680 (26.77)

For motor		DE shaft extension							
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)

1PH718**1PH7224**

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

Asynchronous motors

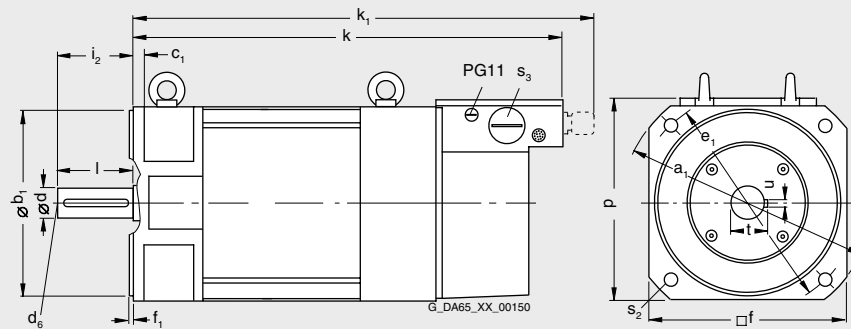
Dimension drawings

1PH7 motors Forced ventilation

For motor		Dimensions in mm (in)														DE shaft extension				
Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f AB	f ₁ T	i ₂ –	k LB	k ₁ –	p HD	s ₂ S	s ₃ –	d D	d ₆ –	l E	t GA	u F	
1PH7, type IM B5, forced ventilation																				
100	1PH7101 1PH7103 1PH7105 1PH7107		250 (9.84)	180 (7.09)	10 (0.39)	215 (8.46)	196 (7.72)	4 (0.16)	80 (3.15)	411 (16.18)	434 (17.09)	218 (8.58)	14 (0.55)	PG29	38 (1.50)	M12	80 (3.15)	41 (1.61)	10 (0.39)	
										506 (19.92)	529 (20.83)									
132	1PH7131 1PH7133 1PH7135 1PH7137		350 (13.78)	250 (9.84)	16 (0.63)	300 (11.81)	260 (10.24)	5 (0.20)	110 (4.33)	538 (21.18)	561 (22.09)	273 (10.75)	18 (0.71)	PG36	42 (1.65)	M16	110 (4.33)	45 (1.77)	12 (0.47)	
										623 (24.53)	646 (25.43)									

For deviating and additional dimensions for 1PH7 motors with DRIVE-CLiQ, see 1PH7 motors with DRIVE-CLiQ.

1PH710
1PH713



Asynchronous motors

Dimension drawings

1PH7 motors Forced ventilation

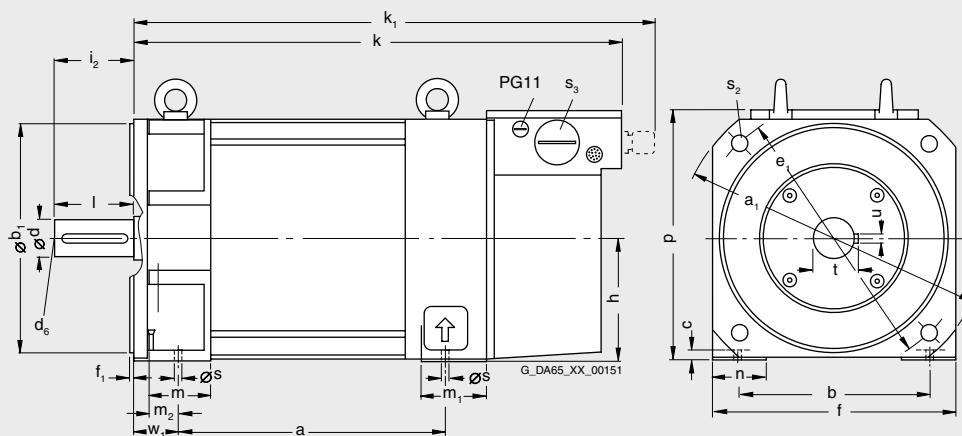
For motor		Dimensions in mm (in)																	
Shaft height	Type	DIN IEC	a B	a ₁ P	b A	b ₁ N	c LA	e ₁ M	f AB	f ₁ T	h H	i ₂ –	k LB	k ₁ –	m BA	m ₁ –	m ₂ –	n AA	p HD
1PH7, type IM B35, forced ventilation																			
100	1PH7101		202.5	250	160	180	11	215	196	4	100	80	411	435	52	64	27	39	220
	1PH7103		(7.97)	(9.84)	(6.30)	(7.09)	(0.43)	(8.46)	(7.72)	(0.16)	(3.94)	(3.15)	(16.18)	(17.13)	(2.05)	(2.52)	(1.06)	(1.54)	(8.66)
	1PH7105		297.5										506	529					
	1PH7107		(11.71)										(19.92)	(20.83)					
132	1PH7131		265.5	350	216	250	14	300	260	5	132	110	538	561	63	75	33	52	275
	1PH7133		(10.45)	(13.78)	(8.50)	(9.84)	(0.55)	(11.81)	(10.24)	(0.20)	(5.20)	(4.33)	(21.18)	(22.09)	(2.48)	(2.95)	(1.30)	(2.05)	(10.83)
	1PH7135		350.5										623	646					
	1PH7137		(13.80)										(24.53)	(25.43)					
160	1PH7163		346.5	400	254	300	17	350	314	5	160	110	640	663	78	81	42	62	330
			(13.64)	(15.75)	(10.00)	(11.81)	(0.67)	(13.78)	(12.36)	(0.20)	(6.30)	(4.33)	(25.20)	(26.10)	(3.07)	(3.19)	(1.65)	(2.44)	(12.99)
	1PH7167		406.5										700	723					
			(16.00)										(27.56)	(28.46)					

DE shaft extension

Shaft height	Type	DIN IEC	s K	s ₂ S	s ₃ –	w ₁ C	d D	d ₆ –	l E	t GA	u F
100	1PH7101		12	14	PG29	40	38	M12	80	41	10
	1PH7103		(0.47)	(0.55)		(1.57)	(1.50)		(3.15)	(1.61)	(0.39)
	1PH7105										
	1PH7107										
132	1PH7131		12	18	PG36	50	42	M16	110	45	12
	1PH7133		(0.47)	(0.71)		(1.97)	(1.65)		(4.33)	(1.77)	(0.47)
	1PH7135										
	1PH7137										
160	1PH7163		14	18	PG42	64	55	M20	110	59	16
	1PH7167		(0.47)	(0.71)		(2.52)	(2.17)		(4.33)	(2.32)	(0.63)

For deviating and additional dimensions for 1PH7 motors with DRIVE-CLiQ, see 1PH7 motors with DRIVE-CLiQ.

**1PH710
1PH713
1PH716**



Asynchronous motors

Dimension drawings

1PH7 motors Forced ventilation

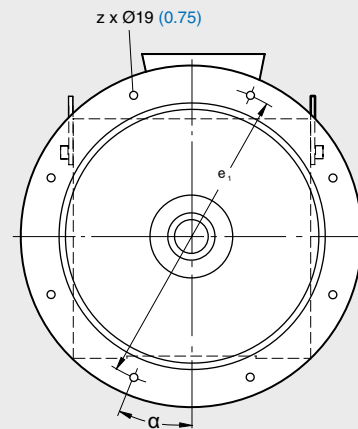
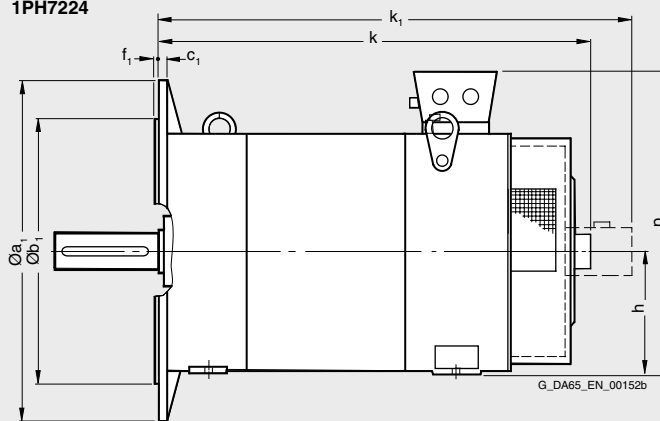
For motor Dimensions in mm (in)

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

Terminal box type 1XB7...

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 —	...322 p ¹⁾	...422 p ¹⁾	...700 p ¹⁾	z —	α —
1PH7, type IM B35, forced ventilation, direction of air flow DE → NDE															
180	1PH7184		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		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°

**1PH718
1PH7224**



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

Asynchronous motors

Dimension drawings

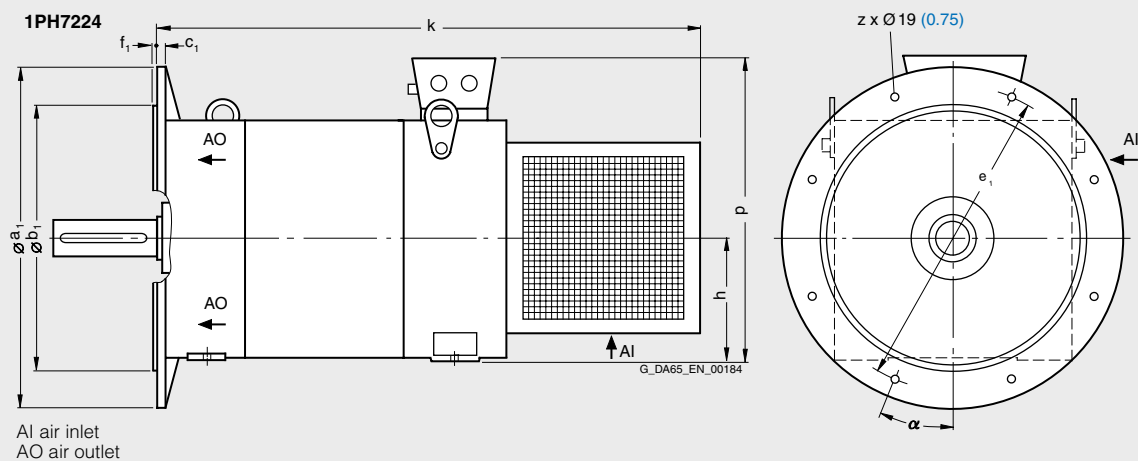
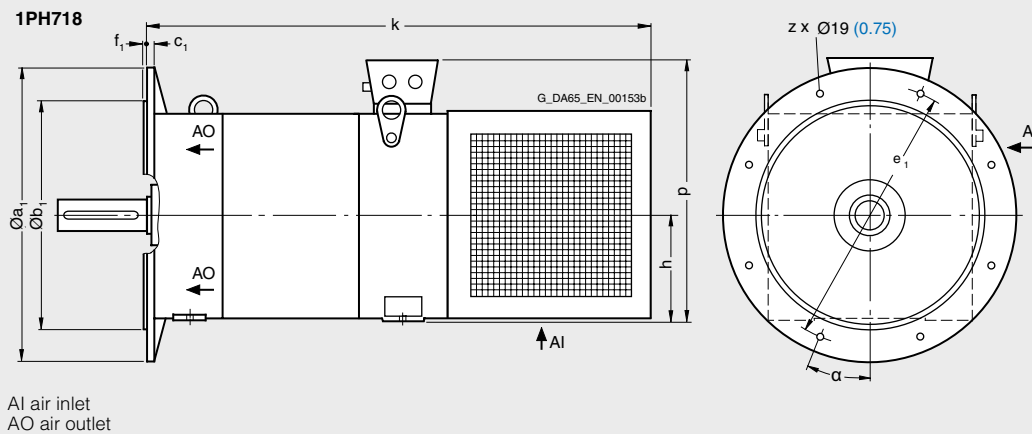
1PH7 motors Forced ventilation

For motor Dimensions in mm (in)

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

Terminal box type 1XB7...

Shaft height	Type	DIN IEC	a ₁ P	b ₁ N	c ₁ LA	e ₁ M	f ₁ T	h H	k LB	...322 p ¹⁾	...422 p ¹⁾	...700 p ¹⁾	z –	α –
1PH7, type IM B35, forced ventilation, direction of air flow NDE → DE														
180	1PH7184		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		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 (23.39)	645 (25.43)	680 (26.77)	8	22.5°



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

Asynchronous motors

Dimension drawings

1PH7 motors with DRIVE-CLiQ
Forced ventilation

For motor		Dimensions in mm (in)					
Shaft height	Type	DIN IEC	k LB	k ₁ –	p ₁ –	x –	y –
Deviating and additional dimensions for 1PH7 motors with DRIVE-CLiQ to those given in dimension tables 1PH7, forced ventilation							
100	1PH7101		411	453	81	52.5	63.5
	1PH7103		(16.18)	(17.83)	(3.19)	(2.07)	(2.50)
	1PH7105		506	548			
	1PH7107		(19.92)	(21.57)			
132	1PH7131		538	580	103.5	66	63.5
	1PH7133		(21.18)	(22.83)	(4.07)	(2.60)	(2.50)
	1PH7135		623	665			
	1PH7137		(24.53)	(26.18)			
160	1PH7163		640	682	127	75	63.5
			(25.20)	(26.85)	(5.00)	(2.95)	(2.50)
	1PH7167		700	742			
			(27.56)	(29.21)			

1PH710
1PH713
1PH716

