Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 25.03.2024

Bearing type: regular

Controller: Common ESC

Measuring Parameter

Voltage: **20.0 [V]**

Throttle setting: 100%

Calculated Motor Constants

nl: 2,185.9 [RPM] Io: 5.7 [A] kV: 110.5 [RPM/V] kn: -4.25 [RPM/A] kT: 9.96 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
20.0	20.0	2,144.8	400.0	320.1	142.5	80.01
20.0	25.0	2,111.0	500.0	425.1	192.3	85.02
20.0	30.0	2,078.1	600.0	526.9	242.1	87.81
20.0	35.0	2,046.2	700.0	625.5	291.9	89.35
20.0	40.0	2,015.0	800.0	720.8	341.6	90.10
20.0	45.0	1,984.7	900.0	813.5	391.4	90.39
20.0	50.0	1,955.2	1,000.0	903.3	441.2	90.33
20.0	55.0	1,926.4	1,100.0	990.5	491.0	90.05
20.0	60.0	1,898.3	1,200.0	1,075.1	540.8	89.59
20.0	65.0	1,870.9	1,300.0	1,156.9	590.5	88.99
20.0	70.0	1,844.1	1,400.0	1,236.5	640.3	88.32
20.0	75.0	1,818.0	1,500.0	1,313.8	690.1	87.59
20.0	80.0	1,792.4	1,600.0	1,388.8	739.9	86.80
20.0	85.0	1,767.3	1,700.0	1,461.5	789.7	85.97
20.0	90.0	1,742.7	1,800.0	1,531.9	839.4	85.10
20.0	95.0	1,718.6	1,900.0	1,600.3	889.2	84.23
20.0	100.0	1,694.9	2,000.0	1,666.6	939.0	83.33
20.0	105.0	1,671.5	2,100.0	1,730.8	988.8	82.42
20.0	110.0	1,648.6	2,200.0	1,793.0	1,038.6	81.50
20.0	115.0	1,625.9	2,300.0	1,853.2	1,088.4	80.57
20.0	120.0	1,603.6	2,400.0	1,911.2	1,138.1	79.63
20.0	125.0	1,581.4	2,500.0	1,967.2	1,187.9	78.69
20.0	130.0	1,559.5	2,600.0	2,021.3	1,237.7	77.74
20.0	135.0	1,537.8	2,700.0	2,073.4	1,287.5	76.79
20.0	140.0	1,516.2	2,800.0	2,123.3	1,337.3	75.83
20.0	145.0	1,494.7	2,900.0	2,171.0	1,387.0	74.86

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
20.0	150.0	1,473.2	3,000.0	2,216.6	1,436.8	73.89
20.0	155.0	1,451.8	3,100.0	2,260.1	1,486.6	72.91
20.0	160.0	1,430.4	3,200.0	2,301.4	1,536.4	71.92
20.0	165.0	1,409.0	3,300.0	2,340.4	1,586.2	70.92
20.0	170.0	1,387.4	3,400.0	2,376.8	1,635.9	69.90
20.0	175.0	1,365.8	3,500.0	2,411.0	1,685.7	68.89
20.0	180.0	1,344.0	3,600.0	2,442.6	1,735.5	67.85
20.0	185.0	1,322.0	3,700.0	2,471.6	1,785.3	66.80
20.0	190.0	1,299.9	3,800.0	2,498.0	1,835.1	65.74
20.0	195.0	1,277.4	3,900.0	2,521.4	1,884.9	64.65
20.0	200.0	1,254.7	4,000.0	2,541.9	1,934.6	63.55
20.0	205.0	1,231.6	4,100.0	2,559.3	1,984.4	62.42
20.0	210.0	1,208.2	4,200.0	2,573.7	2,034.2	61.28
20.0	215.0	1,184.4	4,300.0	2,584.8	2,084.0	60.11
20.0	220.0	1,160.2	4,400.0	2,592.5	2,133.8	58.92
20.0	225.0	1,135.5	4,500.0	2,596.4	2,183.5	57.70
20.0	230.0	1,110.3	4,600.0	2,596.7	2,233.3	56.45
20.0	235.0	1,084.5	4,700.0	2,592.9	2,283.1	55.17
20.0	240.0	1,058.2	4,800.0	2,585.2	2,332.9	53.86
20.0	245.0	1,031.3	4,900.0	2,573.3	2,382.7	52.52

nl = rpm with no load

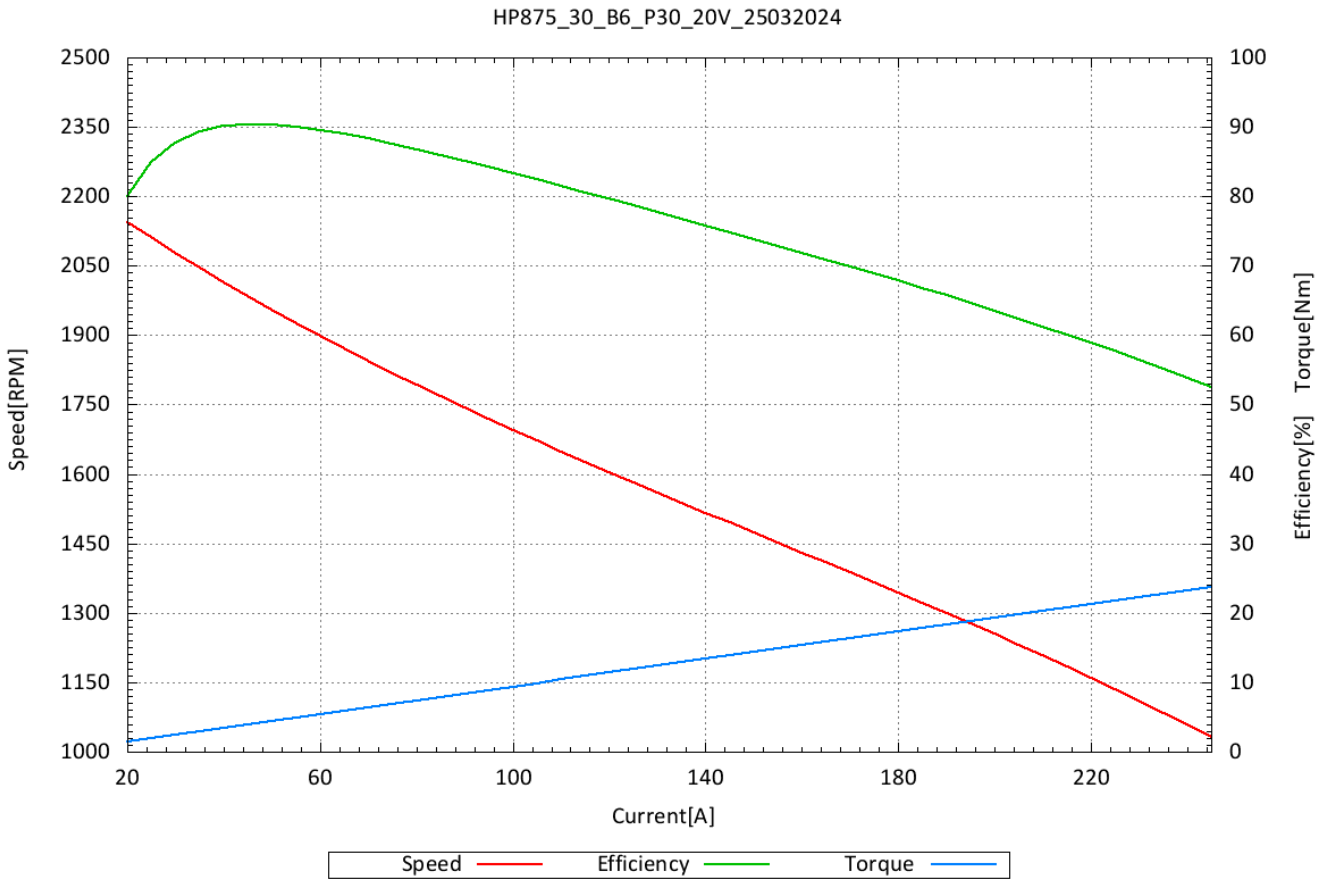
Io = current with no load

kV = specific rpm

kn = rpm drop per Amp

kT = torque constant

[1] incl. Controller


HP875_30_B6_P30_20V_25032024
Speed[RPM]
Efficiency[%] Torque[Nm]
Current[A]
2500
2350
2200
2050
1900
1750
1600
1450
1300
1150
1000
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque

Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 25.03.2024

Bearing type: regular

Controller: Common ESC

Measuring Parameter

Voltage: **30.0 [V]**

Throttle setting: 100%

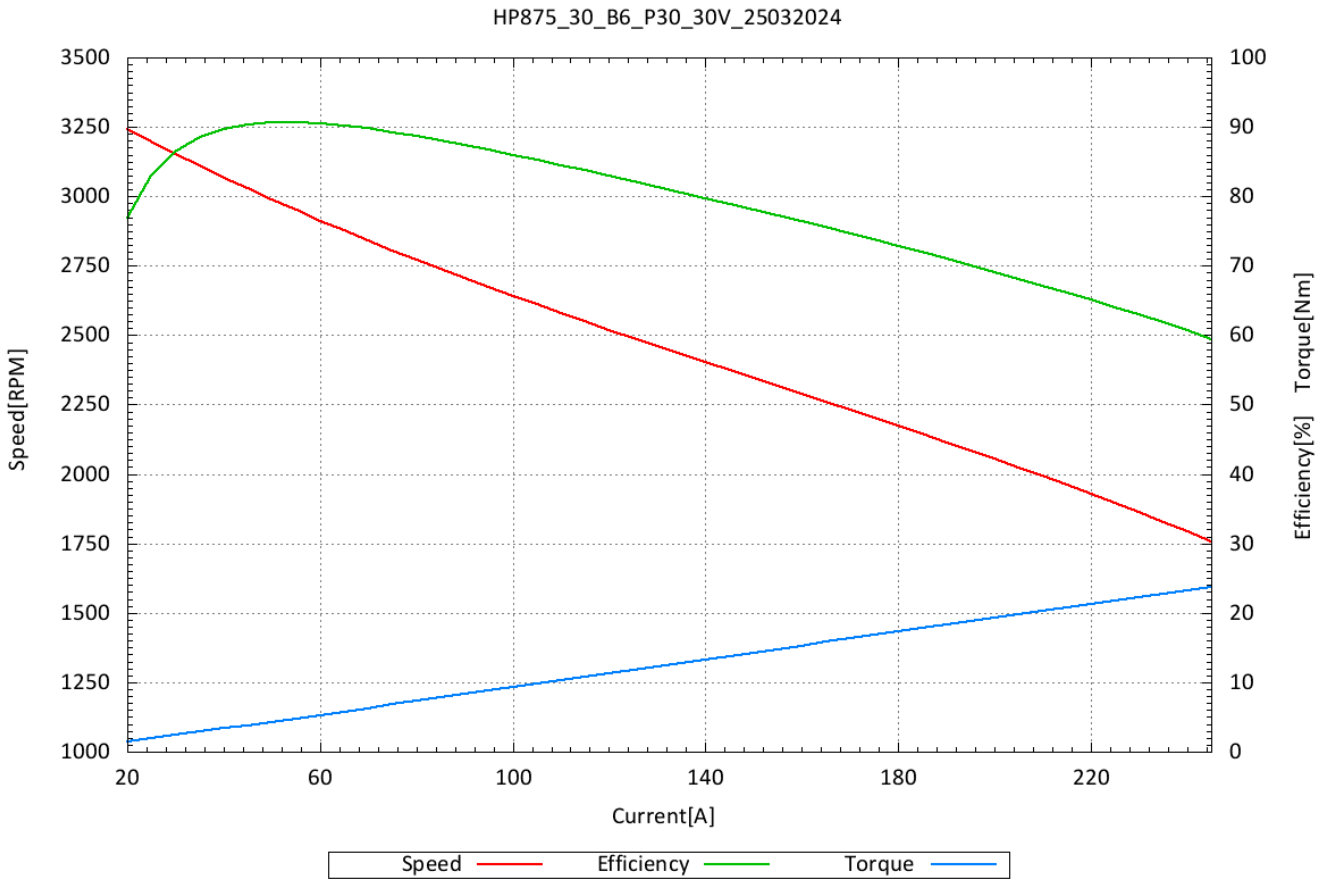
Calculated Motor Constants

nl: 3,274.8 [RPM] Io: 6.3 [A] kV: 110.5 [RPM/V] kn: -6.38 [RPM/A] kT: 9.96 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
30.0	20.0	3,241.3	600.0	461.6	136.0	76.94
30.0	25.0	3,196.3	750.0	621.9	185.8	82.92
30.0	30.0	3,152.5	900.0	777.8	235.6	86.42
30.0	35.0	3,109.8	1,050.0	929.4	285.4	88.52
30.0	40.0	3,068.3	1,200.0	1,077.0	335.2	89.75
30.0	45.0	3,027.9	1,350.0	1,220.8	385.0	90.43
30.0	50.0	2,988.6	1,500.0	1,360.5	434.7	90.70
30.0	55.0	2,950.2	1,650.0	1,496.8	484.5	90.72
30.0	60.0	2,912.7	1,800.0	1,629.7	534.3	90.54
30.0	65.0	2,876.2	1,950.0	1,759.3	584.1	90.22
30.0	70.0	2,840.5	2,100.0	1,885.6	633.9	89.79
30.0	75.0	2,805.6	2,250.0	2,008.4	683.6	89.26
30.0	80.0	2,771.4	2,400.0	2,128.5	733.4	88.69
30.0	85.0	2,738.0	2,550.0	2,245.6	783.2	88.06
30.0	90.0	2,705.2	2,700.0	2,359.8	833.0	87.40
30.0	95.0	2,673.1	2,850.0	2,471.2	882.8	86.71
30.0	100.0	2,641.4	3,000.0	2,579.4	932.5	85.98
30.0	105.0	2,610.4	3,150.0	2,685.2	982.3	85.25
30.0	110.0	2,579.7	3,300.0	2,788.2	1,032.1	84.49
30.0	115.0	2,549.5	3,450.0	2,888.5	1,081.9	83.72
30.0	120.0	2,519.7	3,600.0	2,986.1	1,131.7	82.95
30.0	125.0	2,490.2	3,750.0	3,081.0	1,181.5	82.16
30.0	130.0	2,461.0	3,900.0	3,173.0	1,231.2	81.36
30.0	135.0	2,432.0	4,050.0	3,262.4	1,281.0	80.55
30.0	140.0	2,403.2	4,200.0	3,349.1	1,330.8	79.74
30.0	145.0	2,374.5	4,350.0	3,433.0	1,380.6	78.92

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
30.0	150.0	2,345.9	4,500.0	3,514.0	1,430.4	78.09
30.0	155.0	2,317.4	4,650.0	3,591.9	1,480.1	77.24
30.0	160.0	2,288.8	4,800.0	3,666.9	1,529.9	76.39
30.0	165.0	2,260.2	4,950.0	3,739.0	1,579.7	75.53
30.0	170.0	2,231.5	5,100.0	3,807.9	1,629.5	74.66
30.0	175.0	2,202.7	5,250.0	3,873.6	1,679.3	73.78
30.0	180.0	2,173.6	5,400.0	3,935.5	1,729.0	72.88
30.0	185.0	2,144.4	5,550.0	3,994.5	1,778.8	71.97
30.0	190.0	2,114.8	5,700.0	4,049.6	1,828.6	71.05
30.0	195.0	2,084.9	5,850.0	4,101.1	1,878.4	70.10
30.0	200.0	2,054.6	6,000.0	4,148.7	1,928.2	69.14
30.0	205.0	2,023.8	6,150.0	4,192.0	1,978.0	68.16
30.0	210.0	1,992.6	6,300.0	4,231.1	2,027.7	67.16
30.0	215.0	1,960.9	6,450.0	4,266.0	2,077.5	66.14
30.0	220.0	1,928.5	6,600.0	4,296.1	2,127.3	65.09
30.0	225.0	1,895.6	6,750.0	4,321.7	2,177.1	64.03
30.0	230.0	1,862.0	6,900.0	4,342.2	2,226.9	62.93
30.0	235.0	1,827.7	7,050.0	4,357.3	2,276.6	61.81
30.0	240.0	1,792.6	7,200.0	4,367.1	2,326.4	60.65
30.0	245.0	1,756.7	7,350.0	4,371.3	2,376.2	59.47

nl = rpm with no load
Io = current with no load
kV = specific rpm
kn = rpm drop per Amp
kT = torque constant
[1] incl. Controller


HP875_30_B6_P30_30V_25032024
Speed[RPM]
Efficiency[%] Torque[Nm]
Current[A]
3500
3250
3000
2750
2500
2250
2000
1750
1500
1250
1000
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque

Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 25.03.2024

Bearing type: regular

Controller: Common ESC

Measuring Parameter

Voltage: **40.0 [V]**

Throttle setting: 100%

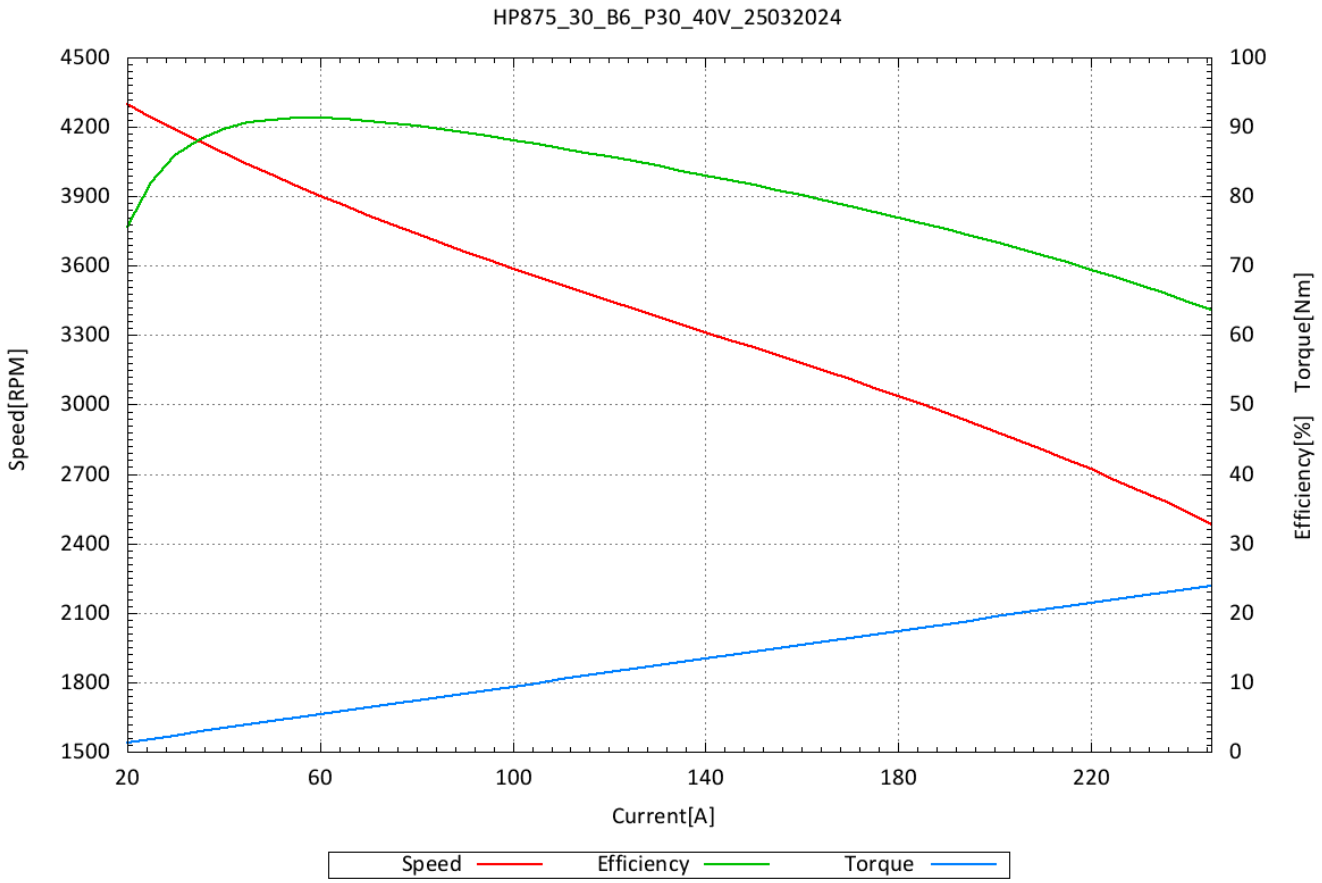
Calculated Motor Constants

nl: 4,382.7 [RPM] Io: 6.6 [A] kV: 111.0 [RPM/V] kn: -8.38 [RPM/A] kT: 10.04 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
40.0	20.0	4,297.0	800.0	605.2	134.5	75.65
40.0	25.0	4,242.1	1,000.0	820.1	184.6	82.01
40.0	30.0	4,188.9	1,200.0	1,030.0	234.8	85.83
40.0	35.0	4,137.4	1,400.0	1,234.8	285.0	88.20
40.0	40.0	4,087.6	1,600.0	1,434.8	335.2	89.68
40.0	45.0	4,039.3	1,800.0	1,630.2	385.4	90.57
40.0	50.0	3,992.5	2,000.0	1,821.2	435.6	91.06
40.0	55.0	3,947.1	2,200.0	2,008.0	485.8	91.27
40.0	60.0	3,903.0	2,400.0	2,190.3	535.9	91.26
40.0	65.0	3,860.1	2,600.0	2,369.2	586.1	91.12
40.0	70.0	3,818.5	2,800.0	2,544.4	636.3	90.87
40.0	75.0	3,777.8	3,000.0	2,715.9	686.5	90.53
40.0	80.0	3,738.2	3,200.0	2,883.9	736.7	90.12
40.0	85.0	3,699.6	3,400.0	3,048.6	786.9	89.67
40.0	90.0	3,661.7	3,600.0	3,209.9	837.1	89.16
40.0	95.0	3,624.7	3,800.0	3,367.6	887.2	88.62
40.0	100.0	3,588.3	4,000.0	3,522.4	937.4	88.06
40.0	105.0	3,552.5	4,200.0	3,674.0	987.6	87.48
40.0	110.0	3,517.3	4,400.0	3,822.5	1,037.8	86.88
40.0	115.0	3,482.6	4,600.0	3,967.9	1,088.0	86.26
40.0	120.0	3,448.2	4,800.0	4,110.0	1,138.2	85.62
40.0	125.0	3,414.1	5,000.0	4,248.8	1,188.4	84.98
40.0	130.0	3,380.3	5,200.0	4,384.1	1,238.5	84.31
40.0	135.0	3,346.6	5,400.0	4,516.3	1,288.7	83.64
40.0	140.0	3,312.9	5,600.0	4,645.0	1,338.9	82.95
40.0	145.0	3,279.3	5,800.0	4,770.3	1,389.1	82.25

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
40.0	150.0	3,245.5	6,000.0	4,891.7	1,439.3	81.53
40.0	155.0	3,211.6	6,200.0	5,009.5	1,489.5	80.80
40.0	160.0	3,177.5	6,400.0	5,123.0	1,539.6	80.05
40.0	165.0	3,143.0	6,600.0	5,232.6	1,589.8	79.28
40.0	170.0	3,108.2	6,800.0	5,338.0	1,640.0	78.50
40.0	175.0	3,072.8	7,000.0	5,438.8	1,690.2	77.70
40.0	180.0	3,036.9	7,200.0	5,534.9	1,740.4	76.87
40.0	185.0	3,000.4	7,400.0	5,626.1	1,790.6	76.03
40.0	190.0	2,963.1	7,600.0	5,711.9	1,840.8	75.16
40.0	195.0	2,925.1	7,800.0	5,792.1	1,890.9	74.26
39.9	200.0	2,886.2	7,980.0	5,866.8	1,941.1	73.52
39.9	205.0	2,846.3	8,179.5	5,935.3	1,991.3	72.56
39.9	210.0	2,805.4	8,379.0	5,997.5	2,041.5	71.58
39.9	215.0	2,763.4	8,578.5	6,053.0	2,091.7	70.56
39.9	220.0	2,720.3	8,778.0	6,101.6	2,141.9	69.51
39.9	225.0	2,675.8	8,977.5	6,142.5	2,192.1	68.42
39.9	230.0	2,630.1	9,177.0	6,175.5	2,242.2	67.29
39.9	235.0	2,582.9	9,376.5	6,200.5	2,292.4	66.13
39.9	240.0	2,534.2	9,576.0	6,216.8	2,342.6	64.92
39.9	245.0	2,484.0	9,775.5	6,224.2	2,392.8	63.67

nl = rpm with no load
Io = current with no load
kV = specific rpm
kn = rpm drop per Amp
kT = torque constant
[1] incl. Controller


HP875_30_B6_P30_40V_25032024
Speed[RPM]
Efficiency[%]
Torque[Nm]
Current[A]
4500
4200
3900
3600
3300
3000
2700
2400
2100
1800
1500
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque

Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 25.03.2024

Bearing type: regular

Controller: Common ESC

Measuring Parameter

Voltage: **50.0 [V]**

Throttle setting: 100%

Calculated Motor Constants

nl: 5,477.8 [RPM] Io: 6.9 [A] kV: 110.9 [RPM/V] kn: -9.90 [RPM/A] kT: 9.95 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
50.0	20.0	5,393.4	1,000.0	737.6	130.6	73.76
50.0	25.0	5,326.8	1,250.0	1,006.3	180.4	80.50
50.0	30.0	5,262.4	1,500.0	1,268.6	230.2	84.57
50.0	35.0	5,200.1	1,750.0	1,524.2	279.9	87.10
50.0	40.0	5,139.8	2,000.0	1,774.6	329.7	88.73
50.0	45.0	5,081.5	2,250.0	2,019.4	379.5	89.75
50.0	50.0	5,025.0	2,500.0	2,258.5	429.2	90.34
50.0	55.0	4,970.2	2,750.0	2,493.1	479.0	90.66
50.0	60.0	4,917.1	3,000.0	2,722.9	528.8	90.76
50.0	65.0	4,865.6	3,250.0	2,948.1	578.6	90.71
50.0	70.0	4,815.5	3,500.0	3,168.4	628.3	90.53
50.0	75.0	4,766.8	3,750.0	3,384.9	678.1	90.26
50.0	80.0	4,719.5	4,000.0	3,597.5	727.9	89.94
50.0	85.0	4,673.3	4,250.0	3,806.0	777.7	89.55
50.0	90.0	4,628.2	4,500.0	4,010.1	827.4	89.11
50.0	95.0	4,584.2	4,750.0	4,211.1	877.2	88.65
50.0	100.0	4,541.1	5,000.0	4,408.3	927.0	88.17
50.0	105.0	4,498.9	5,250.0	4,601.5	976.7	87.65
50.0	110.0	4,457.4	5,500.0	4,791.5	1,026.5	87.12
50.0	115.0	4,416.5	5,750.0	4,977.8	1,076.3	86.57
50.0	120.0	4,376.3	6,000.0	5,160.7	1,126.1	86.01
50.0	125.0	4,336.5	6,250.0	5,339.5	1,175.8	85.43
50.0	130.0	4,297.1	6,500.0	5,515.1	1,225.6	84.85
50.0	135.0	4,258.0	6,750.0	5,687.0	1,275.4	84.25
50.0	140.0	4,219.1	7,000.0	5,855.0	1,325.2	83.64
50.0	145.0	4,180.3	7,250.0	6,018.8	1,374.9	83.02

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
50.0	150.0	4,141.6	7,500.0	6,179.0	1,424.7	82.39
50.0	155.0	4,102.8	7,750.0	6,335.1	1,474.5	81.74
50.0	160.0	4,063.8	8,000.0	6,486.8	1,524.3	81.09
50.0	165.0	4,024.6	8,250.0	6,633.7	1,574.0	80.41
50.0	170.0	3,985.1	8,500.0	6,776.4	1,623.8	79.72
50.0	175.0	3,945.1	8,750.0	6,914.1	1,673.6	79.02
50.0	180.0	3,904.6	9,000.0	7,046.4	1,723.3	78.29
50.0	185.0	3,863.5	9,250.0	7,173.7	1,773.1	77.55
50.0	190.0	3,821.7	9,500.0	7,295.4	1,822.9	76.79
50.0	195.0	3,779.1	9,750.0	7,411.1	1,872.7	76.01
50.0	200.0	3,735.6	10,000.0	7,520.3	1,922.4	75.20
50.0	205.0	3,691.2	10,250.0	7,623.4	1,972.2	74.37
50.0	210.0	3,645.7	10,500.0	7,719.5	2,022.0	73.52
50.0	215.0	3,599.0	10,750.0	7,808.3	2,071.8	72.64
50.0	220.0	3,551.1	11,000.0	7,889.2	2,121.5	71.72
50.0	225.0	3,501.9	11,250.0	7,962.6	2,171.3	70.78
50.0	230.0	3,451.2	11,500.0	8,027.3	2,221.1	69.80
50.0	235.0	3,399.1	11,750.0	8,083.0	2,270.8	68.79
50.0	240.0	3,345.3	12,000.0	8,129.5	2,320.6	67.75
50.0	245.0	3,289.8	12,250.0	8,166.2	2,370.4	66.66

nl = rpm with no load

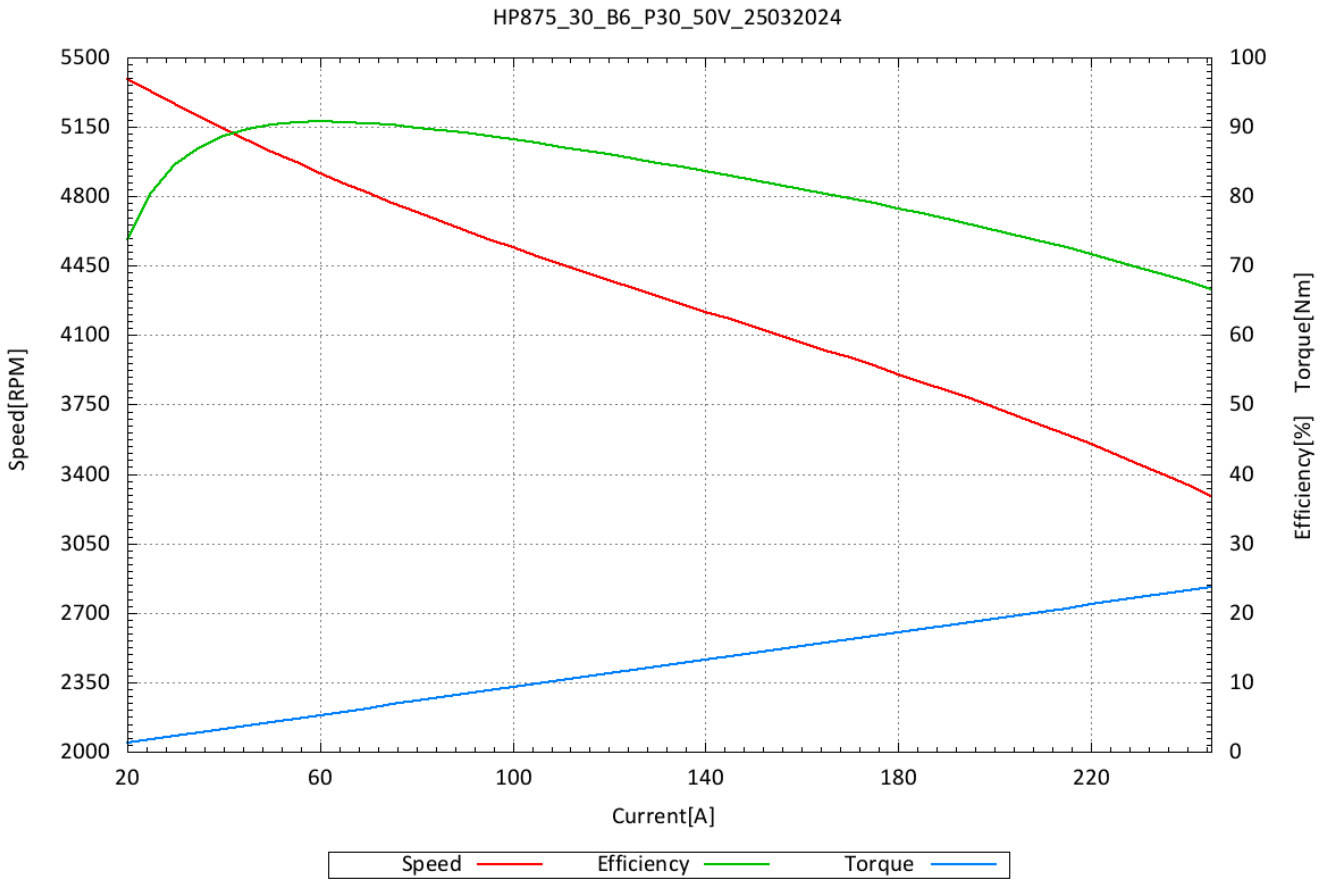
Io = current with no load

kV = specific rpm

kn = rpm drop per Amp

kT = torque constant

[1] incl. Controller


HP875_30_B6_P30_50V_25032024
Speed[RPM]
Efficiency[%] Torque[Nm]
Current[A]
5500
5150
4800
4450
4100
3750
3400
3050
2700
2350
2000
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque

Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 25.03.2024

Bearing type: regular

Controller: Common ESC

Measuring Parameter

Voltage: **60.0 [V]**

Throttle setting: 100%

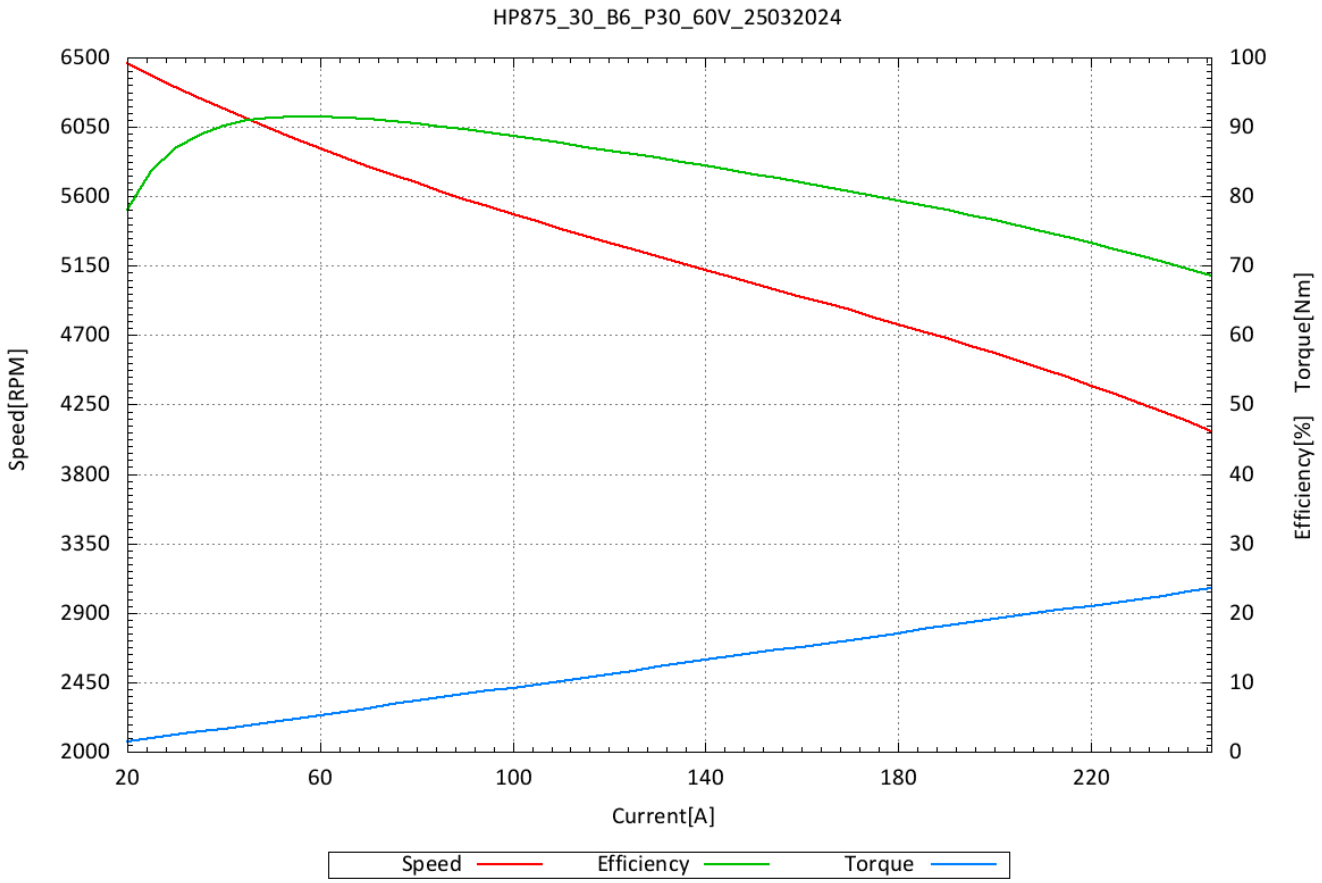
Calculated Motor Constants

nl: 6,567.3 [RPM] Io: 5.9 [A] kV: 110.6 [RPM/V] kn: -11.28 [RPM/A] kT: 9.83 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
60.0	20.0	6,460.1	1,200.0	935.6	138.3	77.97
60.0	25.0	6,383.0	1,500.0	1,253.3	187.5	83.55
60.0	30.0	6,308.6	1,800.0	1,563.7	236.7	86.87
60.0	35.0	6,236.7	2,100.0	1,866.6	285.8	88.88
60.0	40.0	6,167.3	2,400.0	2,163.6	335.0	90.15
60.0	45.0	6,100.1	2,700.0	2,453.6	384.1	90.88
59.9	50.0	6,035.2	2,995.0	2,738.5	433.3	91.43
59.9	55.0	5,972.5	3,294.5	3,017.7	482.5	91.60
59.9	60.0	5,911.7	3,594.0	3,291.0	531.6	91.57
59.9	65.0	5,852.8	3,893.5	3,559.7	580.8	91.43
59.9	70.0	5,795.7	4,193.0	3,823.0	629.9	91.18
59.9	75.0	5,740.3	4,492.5	4,082.2	679.1	90.87
59.9	80.0	5,686.4	4,792.0	4,336.9	728.3	90.50
59.9	85.0	5,634.0	5,091.5	4,586.6	777.4	90.08
59.9	90.0	5,583.0	5,391.0	4,832.7	826.6	89.64
59.9	95.0	5,533.2	5,690.5	5,074.1	875.7	89.17
59.9	100.0	5,484.5	5,990.0	5,312.0	924.9	88.68
59.9	105.0	5,436.9	6,289.5	5,546.0	974.1	88.18
59.9	110.0	5,390.2	6,589.0	5,775.6	1,023.2	87.65
59.9	115.0	5,344.3	6,888.5	6,001.7	1,072.4	87.13
59.9	120.0	5,299.0	7,188.0	6,223.3	1,121.5	86.58
59.9	125.0	5,254.4	7,487.5	6,441.7	1,170.7	86.03
59.9	130.0	5,210.3	7,787.0	6,656.0	1,219.9	85.48
59.9	135.0	5,166.5	8,086.5	6,865.7	1,269.0	84.90
59.9	140.0	5,123.0	8,386.0	7,071.9	1,318.2	84.33
59.9	145.0	5,079.6	8,685.5	7,273.1	1,367.3	83.74

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
59.8	150.0	5,036.3	8,970.0	7,470.6	1,416.5	83.28
59.8	155.0	4,992.9	9,269.0	7,663.5	1,465.7	82.68
59.8	160.0	4,949.4	9,568.0	7,851.2	1,514.8	82.06
59.8	165.0	4,905.5	9,867.0	8,034.3	1,564.0	81.43
59.8	170.0	4,861.3	10,166.0	8,211.9	1,613.1	80.78
59.8	175.0	4,816.6	10,465.0	8,384.5	1,662.3	80.12
59.8	180.0	4,771.3	10,764.0	8,551.5	1,711.5	79.45
59.8	185.0	4,725.2	11,063.0	8,711.8	1,760.6	78.75
59.8	190.0	4,678.4	11,362.0	8,866.6	1,809.8	78.04
59.8	195.0	4,630.6	11,661.0	9,014.1	1,858.9	77.30
59.8	200.0	4,581.7	11,960.0	9,155.0	1,908.1	76.55
59.8	205.0	4,531.7	12,259.0	9,288.1	1,957.2	75.77
59.8	210.0	4,480.5	12,558.0	9,414.0	2,006.4	74.96
59.8	215.0	4,427.9	12,857.0	9,531.6	2,055.6	74.14
59.8	220.0	4,373.8	13,156.0	9,640.0	2,104.7	73.27
59.8	225.0	4,318.1	13,455.0	9,739.7	2,153.9	72.39
59.8	230.0	4,260.7	13,754.0	9,829.3	2,203.0	71.47
59.8	235.0	4,201.5	14,053.0	9,909.2	2,252.2	70.51
59.8	240.0	4,140.5	14,352.0	9,978.7	2,301.4	69.53
59.8	245.0	4,077.3	14,651.0	10,036.0	2,350.5	68.50

nl = rpm with no load
Io = current with no load
kV = specific rpm
kn = rpm drop per Amp
kT = torque constant
[1] incl. Controller


HP875_30_B6_P30_60V_25032024
Speed[RPM]
Efficiency[%] Torque[Nm]
Current[A]
6500
6050
5600
5150
4700
4250
3800
3350
2900
2450
2000
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque

Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 12.04.2024
Bearing type: regular
Controller: Common ESC

Measuring Parameter

Voltage: **70.0 [V]**

Throttle setting: 100%

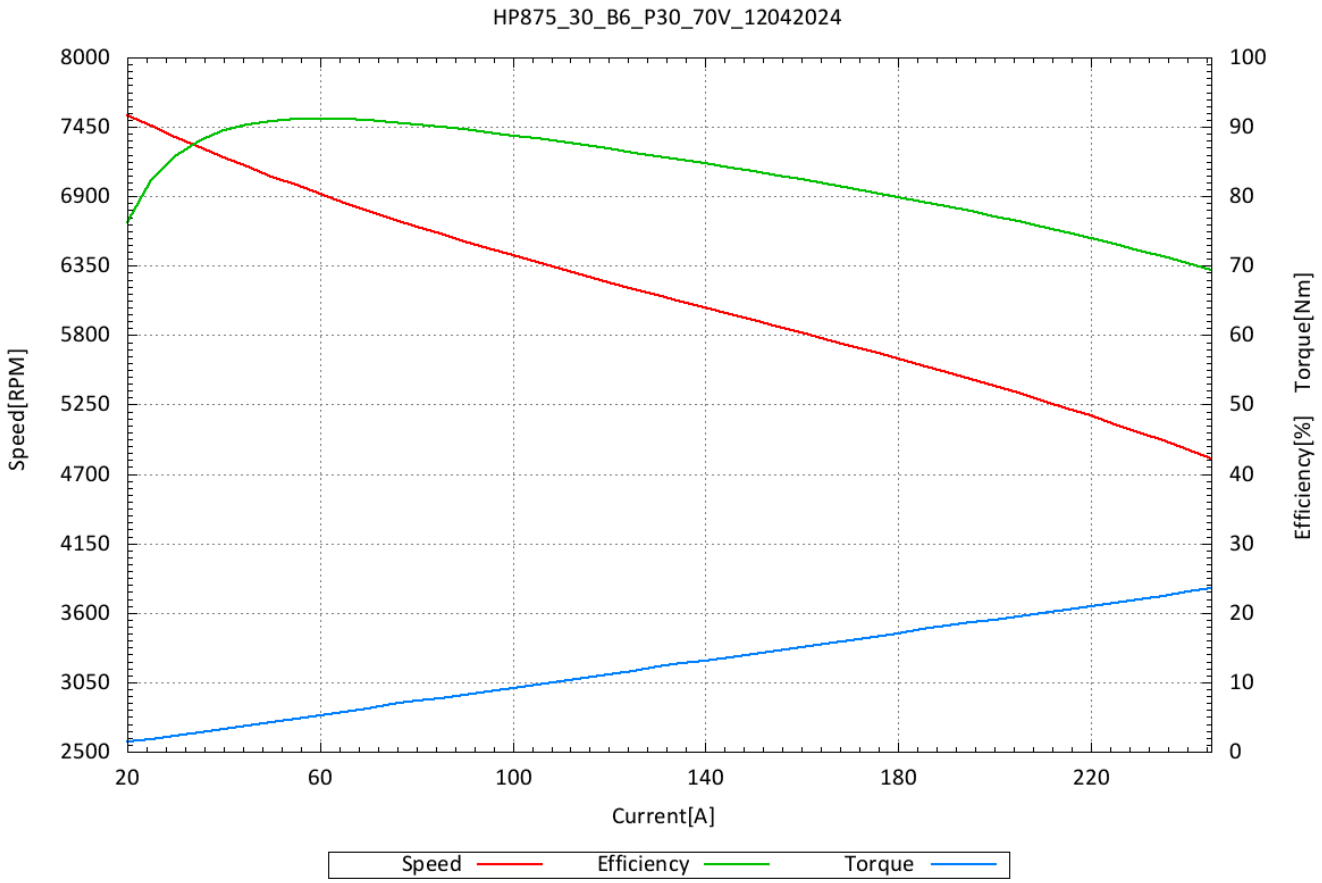
Calculated Motor Constants

nl: 7,657.5 [RPM] Io: 6.3 [A] kV: 110.6 [RPM/V] kn: -13.16 [RPM/A] kT: 9.83 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
70.0	20.0	7,544.8	1,400.0	1,067.4	135.1	76.24
70.0	25.0	7,456.7	1,750.0	1,439.1	184.3	82.24
70.0	30.0	7,371.6	2,100.0	1,801.7	233.4	85.80
70.0	35.0	7,289.5	2,450.0	2,157.2	282.6	88.05
70.0	40.0	7,210.1	2,800.0	2,504.5	331.7	89.45
70.0	45.0	7,133.4	3,150.0	2,845.4	380.9	90.33
69.9	50.0	7,059.3	3,495.0	3,179.5	430.1	90.97
69.9	55.0	6,987.5	3,844.5	3,506.4	479.2	91.21
69.9	60.0	6,918.1	4,194.0	3,828.1	528.4	91.27
69.9	65.0	6,850.8	4,543.5	4,143.1	577.5	91.19
69.9	70.0	6,785.5	4,893.0	4,453.2	626.7	91.01
69.9	75.0	6,722.2	5,242.5	4,758.0	675.9	90.76
69.9	80.0	6,660.6	5,592.0	5,056.8	725.0	90.43
69.9	85.0	6,600.7	5,941.5	5,351.5	774.2	90.07
69.9	90.0	6,542.4	6,291.0	5,640.6	823.3	89.66
69.9	95.0	6,485.5	6,640.5	5,925.7	872.5	89.24
69.9	100.0	6,429.9	6,990.0	6,206.2	921.7	88.79
69.9	105.0	6,375.4	7,339.5	6,481.4	970.8	88.31
69.9	110.0	6,322.0	7,689.0	6,752.8	1,020.0	87.82
69.9	115.0	6,269.6	8,038.5	7,019.2	1,069.1	87.32
69.9	120.0	6,217.9	8,388.0	7,281.7	1,118.3	86.81
69.9	125.0	6,166.9	8,737.5	7,539.7	1,167.5	86.29
69.9	130.0	6,116.4	9,087.0	7,792.4	1,216.6	85.75
69.9	135.0	6,066.4	9,436.5	8,041.3	1,265.8	85.21
69.9	140.0	6,016.7	9,786.0	8,284.8	1,314.9	84.66
69.9	145.0	5,967.1	10,135.5	8,523.9	1,364.1	84.10

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
69.8	150.0	5,917.6	10,470.0	8,758.1	1,413.3	83.65
69.8	155.0	5,868.0	10,819.0	8,986.4	1,462.4	83.06
69.8	160.0	5,818.3	11,168.0	9,210.0	1,511.6	82.47
69.8	165.0	5,768.2	11,517.0	9,427.3	1,560.7	81.86
69.8	170.0	5,717.6	11,866.0	9,639.2	1,609.9	81.23
69.8	175.0	5,666.5	12,215.0	9,845.0	1,659.1	80.60
69.8	180.0	5,614.7	12,564.0	10,043.7	1,708.2	79.94
69.8	185.0	5,562.1	12,913.0	10,236.2	1,757.4	79.27
69.8	190.0	5,508.5	13,262.0	10,420.8	1,806.5	78.58
69.8	195.0	5,453.9	13,611.0	10,598.5	1,855.7	77.87
69.8	200.0	5,398.1	13,960.0	10,768.2	1,904.9	77.14
69.8	205.0	5,341.0	14,309.0	10,928.9	1,954.0	76.38
69.8	210.0	5,282.4	14,658.0	11,081.1	2,003.2	75.60
69.8	215.0	5,222.3	15,007.0	11,223.6	2,052.3	74.79
69.8	220.0	5,160.4	15,356.0	11,356.4	2,101.5	73.95
69.8	225.0	5,096.8	15,705.0	11,479.1	2,150.7	73.09
69.8	230.0	5,031.2	16,054.0	11,590.0	2,199.8	72.19
69.8	235.0	4,963.6	16,403.0	11,690.0	2,249.0	71.27
69.8	240.0	4,893.8	16,752.0	11,777.2	2,298.1	70.30
69.8	245.0	4,821.7	17,101.0	11,852.2	2,347.3	69.31

nl = rpm with no load
Io = current with no load
kV = specific rpm
kn = rpm drop per Amp
kT = torque constant
[1] incl. Controller


HP875_30_B6_P30_70V_12042024
Speed[RPM]
Efficiency[%] Torque[Nm]
Current[A]
8000
7450
6900
6350
5800
5250
4700
4150
3600
3050
2500
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque

Report calculated on Test Bench Results

Motor type: **NOVA 15-30-B6 P30**

Date: 12.04.2024

Bearing type: regular

Controller: Common ESC

Measuring Parameter

Voltage: **75.0 [V]**

Throttle setting: 100%

Calculated Motor Constants

nl: 8,202.2 [RPM] Io: 6.4 [A] kV: 110.6 [RPM/V] kn: -14.10 [RPM/A] kT: 9.83 [Ncm/A]

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
75.0	20.0	8,087.2	1,500.0	1,130.6	133.5	75.37
75.0	25.0	7,993.6	1,875.0	1,529.4	182.7	81.57
75.0	30.0	7,903.2	2,250.0	1,918.4	231.8	85.26
75.0	35.0	7,815.9	2,625.0	2,299.9	281.0	87.62
75.0	40.0	7,731.6	3,000.0	2,672.7	330.1	89.09
75.0	45.0	7,650.1	3,375.0	3,038.6	379.3	90.03
74.9	50.0	7,571.3	3,745.0	3,396.6	428.4	90.70
74.9	55.0	7,495.0	4,119.5	3,748.6	477.6	91.00
74.9	60.0	7,421.2	4,494.0	4,094.0	526.8	91.10
74.9	65.0	7,349.7	4,868.5	4,432.5	575.9	91.04
74.9	70.0	7,280.4	5,243.0	4,765.8	625.1	90.90
74.9	75.0	7,213.1	5,617.5	5,092.6	674.2	90.66
74.9	80.0	7,147.7	5,992.0	5,414.7	723.4	90.37
74.9	85.0	7,084.1	6,366.5	5,731.5	772.6	90.03
74.9	90.0	7,022.1	6,741.0	6,042.4	821.7	89.64
74.9	95.0	6,961.6	7,115.5	6,349.0	870.9	89.23
74.9	100.0	6,902.6	7,490.0	6,650.1	920.0	88.79
74.9	105.0	6,844.7	7,864.5	6,947.0	969.2	88.33
74.9	110.0	6,788.0	8,239.0	7,239.2	1,018.4	87.86
74.9	115.0	6,732.2	8,613.5	7,525.8	1,067.5	87.37
74.9	120.0	6,677.3	8,988.0	7,808.5	1,116.7	86.88
74.9	125.0	6,623.1	9,362.5	8,085.6	1,165.8	86.36
74.9	130.0	6,569.5	9,737.0	8,358.7	1,215.0	85.84
74.9	135.0	6,516.3	10,111.5	8,626.7	1,264.2	85.32
74.9	140.0	6,463.5	10,486.0	8,889.2	1,313.3	84.77
74.9	145.0	6,410.8	10,860.5	9,147.0	1,362.5	84.22

Voltage [V]	Current [A]	Speed [RPM]	Input Power [W]	Output Power [W]	Torque [Ncm]	Efficiency[1] [%]
74.8	150.0	6,358.2	11,220.0	9,398.8	1,411.6	83.77
74.8	155.0	6,305.6	11,594.0	9,646.0	1,460.8	83.20
74.8	160.0	6,252.7	11,968.0	9,887.2	1,510.0	82.61
74.8	165.0	6,199.5	12,342.0	10,121.8	1,559.1	82.01
74.8	170.0	6,145.8	12,716.0	10,350.8	1,608.3	81.40
74.8	175.0	6,091.5	13,090.0	10,572.6	1,657.4	80.77
74.8	180.0	6,036.4	13,464.0	10,787.9	1,706.6	80.12
74.8	185.0	5,980.5	13,838.0	10,996.2	1,755.8	79.46
74.8	190.0	5,923.6	14,212.0	11,196.1	1,804.9	78.78
74.8	195.0	5,865.6	14,586.0	11,388.7	1,854.1	78.08
74.8	200.0	5,806.3	14,960.0	11,572.1	1,903.2	77.35
74.8	205.0	5,745.6	15,334.0	11,747.2	1,952.4	76.61
74.8	210.0	5,683.4	15,708.0	11,912.8	2,001.6	75.84
74.8	215.0	5,619.5	16,082.0	12,067.8	2,050.7	75.04
74.8	220.0	5,553.8	16,456.0	12,212.9	2,099.9	74.22
74.8	225.0	5,486.2	16,830.0	12,346.3	2,149.0	73.36
74.8	230.0	5,416.5	17,204.0	12,468.5	2,198.2	72.47
74.8	235.0	5,344.6	17,578.0	12,578.4	2,247.4	71.56
74.8	240.0	5,270.5	17,952.0	12,675.0	2,296.5	70.60
74.8	245.0	5,193.8	18,326.0	12,758.1	2,345.7	69.62

nl = rpm with no load

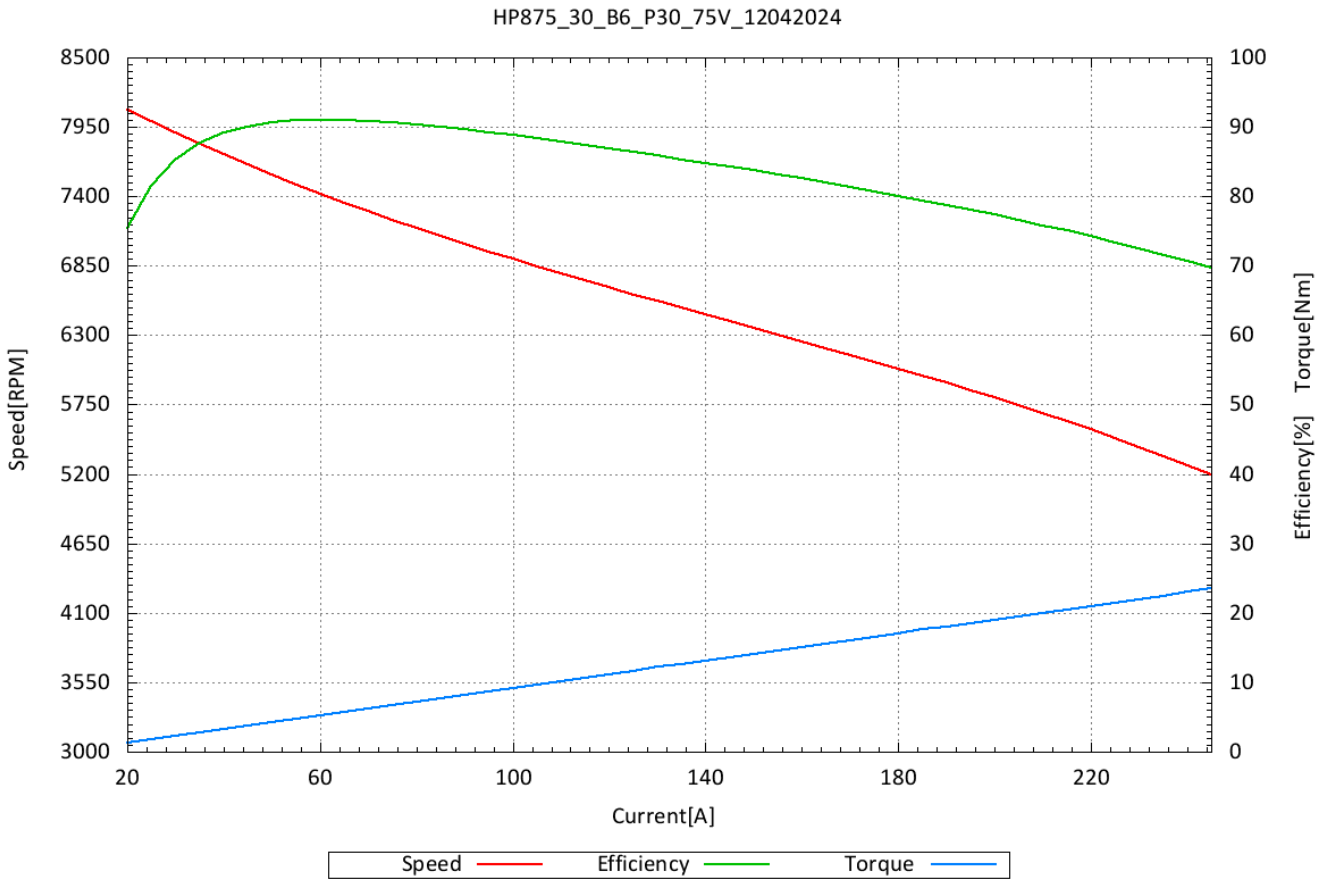
Io = current with no load

kV = specific rpm

kn = rpm drop per Amp

kT = torque constant

[1] incl. Controller


HP875_30_B6_P30_75V_12042024
Speed[RPM]
Efficiency[%] Torque[Nm]
Current[A]
8500
7950
7400
6850
6300
5750
5200
4650
4100
3550
3000
100
90
80
70
60
50
40
30
20
10
0
20
60
100
140
180
220
Speed
Efficiency
Torque