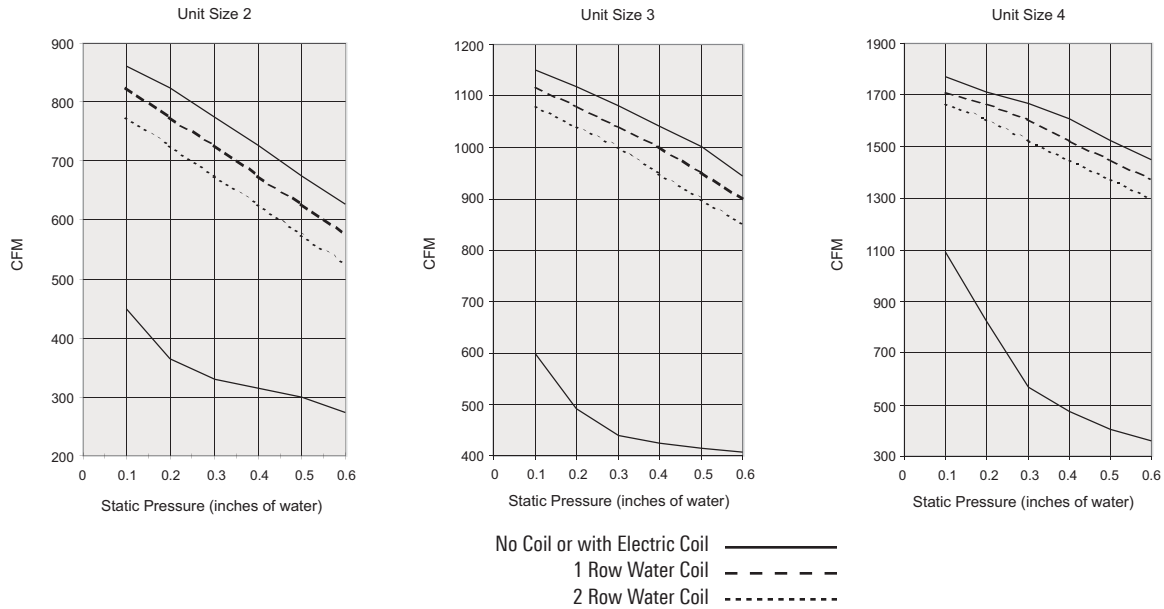


PFLS, AFLS, DFLS / AIRFLOW VS. DOWNSTREAM STATIC PRESSURE



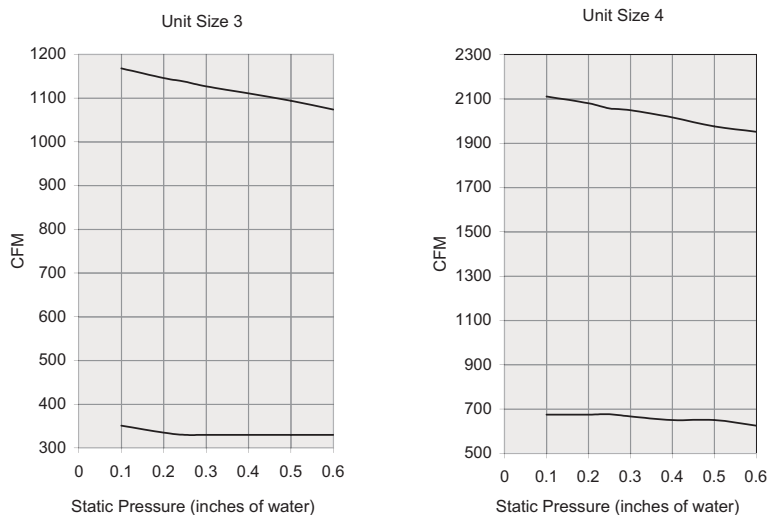
PRIMARY AIR CFM RANGES

Inlet Size	Total cfm Range	PFLS TITUS II		PFLS TITUS I		AFLS TITUS TA1 Analog		DFLS	
		Pneumatic Controller		Pneumatic Controller		Electronic Controller		Typical Digital Controller	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
8	0-900	*145-590	265-900	*190-590	265-900	*145-900	145-900	*145-900	145-900
8 x 16	0-1860	325-1320	590-1860	420-1320	590-1860	325-1860	*325-1860	*325-1860	325-1860

Note 1: An asterisk (\*) indicates Factory cfm settings (except zero) will not be made below this range because control accuracy is reduced

Note 2: For selection procedure, see the section, Engineering Guidelines and the topic 'ECM Motors - Fan Powered Terminals' for additional information

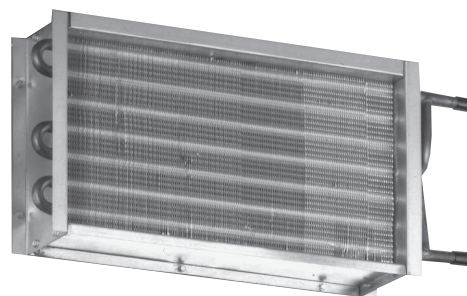
PFLS, AFLS, DFLS WITH ECM MOTOR / AIRFLOW VS. DOWNSTREAM STATIC PRESSURE



PFLS, AFLS, DFLS / WATER COIL HEATING CAPACITY (MBH)

Unit Size	Rows	gpm	Head Loss	Airflow, cfm							
				300	350	400	450	500	550	600	650
2-3	One Row	1.0	0.10	10.3	11.0	11.6	12.1	12.6	13.0	13.4	13.7
		2.0	0.33	11.5	12.4	13.2	13.9	14.5	15.0	15.6	16.0
		4.0	1.24	12.3	13.3	14.1	14.9	15.7	16.3	17.0	17.5
		6.0	2.70	12.5	13.6	14.5	15.3	16.1	16.8	17.5	18.1
		Airsides ΔPs		0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08
	Two Row	1.0	0.20	17.2	18.5	19.6	20.6	21.5	22.3	23.0	23.6
		2.0	0.61	19.7	21.5	23.1	24.6	25.9	27.1	28.2	29.2
		4.0	2.26	21.1	23.2	25.2	26.9	28.6	30.1	31.5	32.8
		6.0	4.90	21.6	23.9	25.9	27.8	29.6	31.2	32.7	34.1
		Airsides ΔPs		0.05	0.06	0.08	0.09	0.11	0.13	0.15	0.17
Unit Size	Rows	gpm	Head Loss	Airflow, cfm							
				450	500	550	600	650	700	750	800
4	One Row	1.0	0.15	16.00	16.6	17.2	17.8	18.3	18.8	19.2	19.6
		2.0	0.48	18.3	19.2	20.1	20.9	21.6	22.3	23.0	23.6
		4.0	1.79	19.7	20.8	21.8	22.7	23.6	24.5	25.3	26.0
		6.0	3.90	20.2	21.3	22.4	23.4	24.4	25.3	26.1	26.9
		Airsides ΔPs		0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05
	Two Row	1.0	0.29	25.3	26.5	27.6	28.6	29.4	30.2	31.0	31.6
		2.0	0.91	30.00	31.9	33.6	35.2	36.6	38.0	39.3	40.5
		4.0	3.36	32.7	35	37.2	39.2	41.0	42.8	44.5	46.1
		6.0	7.29	33.7	36.2	38.5	40.6	42.7	44.6	46.5	48.2
		Airsides ΔPs		0.04	0.04	0.05	0.06	0.06	0.07	0.08	0.09

- All coil performance in accordance with AHRI 410-2001
- Heating capacities are in MBH
- Data based on 180°F entering water and 65°F entering air
- For temperature differentials other than 115°, multiply MBH by correction factors below
- Head loss is in feet of water
- Always supply water to lowest connection pipe to prevent air entrapment
- Air temperature rise = 927 x MBH/cfm
- Water temperature drop = 2.04 x MBH/gpm
- Connection size is ½" OD male solder
- Coils are not intended for steam applications and are labeled for a maximum water temperature of 200°F
- Coils are tested for leakage at test pressure of 500 psi
- Water volumes less than those shown may result in laminar flow and reduced heating capacity. If possible reduce the number of coil rows to increase water velocity into turbulent range.



Correction factors for other entering conditions:

ΔT	50	60	70	80	90	100	115	125	140	150
Factor	0.44	0.52	0.61	0.7	0.79	0.88	1	1.07	1.2	1.3

PFLS, AFLS, DFLS / RADIATED SOUND PERFORMANCE

Size	CFM	Discharge Ps	Min ΔPs	Octave Band Sound Power, Lw																											
				Fan Only							0.5" ΔPs							1.0" ΔPs							2.0" ΔPs						
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
208	350	0.25	0.05	62	50	50	47	38	29	<b>24</b>	64	54	52	49	41	32	<b>27</b>	65	58	55	51	44	36	<b>29</b>	66	61	56	52	47	39	<b>30</b>
	400		0.07	63	52	52	48	40	30	<b>27</b>	65	56	54	50	43	33	<b>28</b>	66	60	56	52	45	37	<b>30</b>	67	62	58	53	49	40	<b>32</b>
	500		0.11	66	55	54	51	43	34	<b>29</b>	68	59	56	53	45	36	<b>32</b>	69	63	59	55	48	39	<b>34</b>	70	65	60	56	51	43	<b>35</b>
	600		0.16	68	58	56	53	45	36	<b>32</b>	70	62	58	55	47	38	<b>34</b>	71	65	61	57	50	41	<b>36</b>	72	68	62	58	53	45	<b>38</b>
	700		0.22	70	60	57	55	47	38	<b>35</b>	70	64	60	57	47	38	<b>35</b>	73	68	62	59	52	43	<b>38</b>	73	70	64	60	54	46	<b>41</b>
308	500	0.25	0.11	60	54	57	45	36	23	<b>32</b>	65	60	57	52	43	33	<b>31</b>	68	64	61	55	48	39	<b>36</b>	70	66	62	57	51	43	<b>37</b>
	600		0.16	63	57	58	48	40	28	<b>33</b>	67	63	58	53	45	34	<b>33</b>	69	67	62	57	50	40	<b>37</b>	71	69	63	59	53	44	<b>40</b>
	700		0.22	66	59	59	50	43	32	<b>34</b>	69	65	61	55	47	36	<b>36</b>	71	69	63	59	52	42	<b>40</b>	73	71	65	60	54	45	<b>42</b>
	850		0.32	69	62	61	54	47	37	<b>36</b>	71	67	63	58	50	39	<b>38</b>	73	72	66	61	53	43	<b>43</b>	74	73	67	63	57	47	<b>44</b>
	1000		NA	71	64	62	57	51	41	<b>38</b>	NA	NA	NA	NA	NA	NA	<b>NA</b>	NA	NA	NA	NA	NA	NA	<b>NA</b>	NA	NA	NA	NA	NA	NA	<b>NA</b>
426 (8 x 16)	800	0.25	0.02	56	52	53	49	40	26	<b>28</b>	59	56	56	53	46	37	<b>30</b>	60	59	58	56	50	46	<b>32</b>	61	61	60	59	54	51	<b>35</b>
	1000		0.03	59	55	56	53	43	31	<b>31</b>	62	59	59	56	48	40	<b>34</b>	63	61	61	58	53	48	<b>36</b>	64	64	63	61	56	53	<b>38</b>
	1200		0.05	61	58	58	55	47	36	<b>33</b>	65	62	61	58	51	41	<b>36</b>	66	64	63	60	55	49	<b>38</b>	66	66	65	63	57	54	<b>40</b>
	1400		0.07	63	60	60	58	49	39	<b>35</b>	67	64	62	60	53	44	<b>37</b>	68	65	65	63	56	50	<b>40</b>	68	68	66	64	59	56	<b>41</b>
	1600		0.09	64	62	62	60	51	42	<b>38</b>	68	65	64	62	54	46	<b>39</b>	69	67	66	64	57	52	<b>41</b>	70	69	67	66	60	57	<b>42</b>

- Radiated sound is the noise transmitted through the unit casing and emitted from the induction port
- Min ΔPs is the difference between atmospheric pressure and the inlet static pressure with the primary damper full open and the unit fan set to match the primary flow
- Sound power levels are in dB, ref 10<sup>-12</sup> watts
- Sound performance based on units lined with standard dual density fiberglass lining
- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI Certified. See page N63 for AHRI Certified Performance Listings.

PFLS, AFLS, DFLS / DISCHARGE SOUND PERFORMANCE

Size	CFM	Discharge Ps	Min ΔPs	Octave Band Sound Power, Lw																											
				Fan Only							0.5" ΔPs							1.0" ΔPs							2.0" ΔPs						
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
208	350	0.25	0.05	39	39	53	56	64	61	<b>25</b>	57	52	56	56	64	61	<b>25</b>	58	56	57	56	64	61	<b>25</b>	59	58	58	56	64	61	<b>25</b>
	400		0.07	45	44	56	59	66	63	<b>27</b>	59	54	59	59	66	63	<b>27</b>	61	59	60	59	66	63	<b>27</b>	62	61	60	59	66	63	<b>27</b>
	500		0.11	54	53	61	63	70	68	<b>31</b>	64	60	63	63	70	68	<b>31</b>	65	63	64	63	70	68	<b>31</b>	66	66	65	63	70	68	<b>31</b>
	600		0.16	61	60	65	66	73	72	<b>35</b>	68	65	67	66	73	72	<b>35</b>	70	68	68	66	73	72	<b>35</b>	71	70	68	66	73	72	<b>35</b>
	700		0.22	67	66	68	69	76	75	<b>38</b>	72	69	70	69	76	75	<b>38</b>	72	71	71	69	76	75	<b>38</b>	74	74	71	69	76	75	<b>38</b>
308	500	0.25	0.11	74	67	64	62	61	58	<b>29</b>	74	69	64	64	64	60	<b>29</b>	74	69	64	64	63	60	<b>29</b>	74	69	64	64	63	60	<b>29</b>
	600		0.16	76	70	66	64	64	61	<b>31</b>	76	72	66	66	66	63	<b>32</b>	76	72	66	66	66	63	<b>32</b>	76	72	66	64	64	63	<b>32</b>
	700		0.22	78	72	68	66	66	64	<b>34</b>	80	74	68	68	68	66	<b>36</b>	80	74	68	66	68	66	<b>36</b>	80	74	68	66	66	66	<b>36</b>
	850		0.32	80	75	70	68	69	67	<b>34</b>	82	77	70	70	69	67	<b>37</b>	82	77	72	68	69	67	<b>37</b>	82	77	72	68	69	67	<b>37</b>
	1000		NA	81	77	72	70	71	70	<b>37</b>	NA	NA	NA	NA	NA	NA	<b>NA</b>	NA	NA	NA	NA	NA	NA	<b>NA</b>	NA	NA	NA	NA	NA	NA	<b>NA</b>
426 (8 x 16)	800	0.25	0.02	59	60	59	60	55	49	<b>17</b>	62	60	61	64	66	60	<b>24</b>	63	62	62	64	65	60	<b>24</b>	63	63	63	64	64	60	<b>24</b>
	1000		0.03	62	62	62	63	60	54	<b>19</b>	65	62	64	66	70	64	<b>28</b>	66	65	65	67	68	64	<b>28</b>	67	66	66	67	66	64	<b>28</b>
	1200		0.05	64	64	65	66	64	59	<b>23</b>	67	66	67	69	72	66	<b>30</b>	68	67	68	69	70	66	<b>30</b>	69	68	68	70	69	66	<b>30</b>
	1400		0.07	65	65	67	68	67	62	<b>26</b>	69	67	67	70	73	68	<b>31</b>	70	68	70	71	72	68	<b>31</b>	71	69	70	71	71	68	<b>31</b>
	1600		0.09	67	67	69	70	70	66	<b>30</b>	71	69	69	72	75	71	<b>34</b>	72	70	72	73	74	71	<b>34</b>	73	71	72	73	73	71	<b>34</b>

- Discharge sound is the noise emitted from the unit discharge into the downstream ductwork
- Min ΔPs is the difference between atmospheric pressure and the inlet static pressure with the primary damper full open and the unit fan set to match the primary flow
- Sound power levels are in dB, ref 10<sup>-12</sup> watts
- Sound performance based on units lined with standard dual density fiberglass lining
- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI Certified. See page N63 for AHRI Certified Performance Listings.