



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF MECHATRONICS

19MCB302 – INDUSTRIAL ELECTRONICS & APPLICATION
III YEAR V SEM

UNIT 4 – Inverter

TOPIC – Three Phase Inverter

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ASSISTANT PROFESSOR,

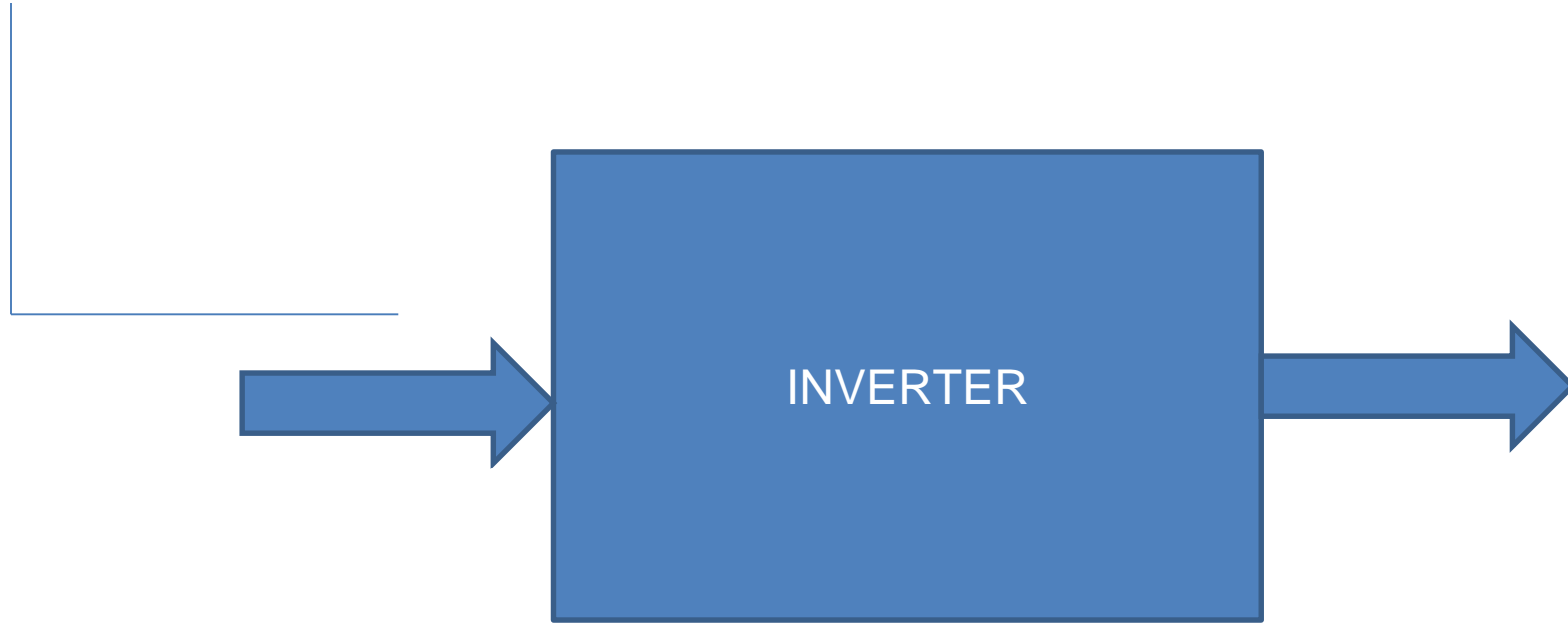
DEPARTMENT OF MECHATRONICS,

SNSCT, Coimbatore.



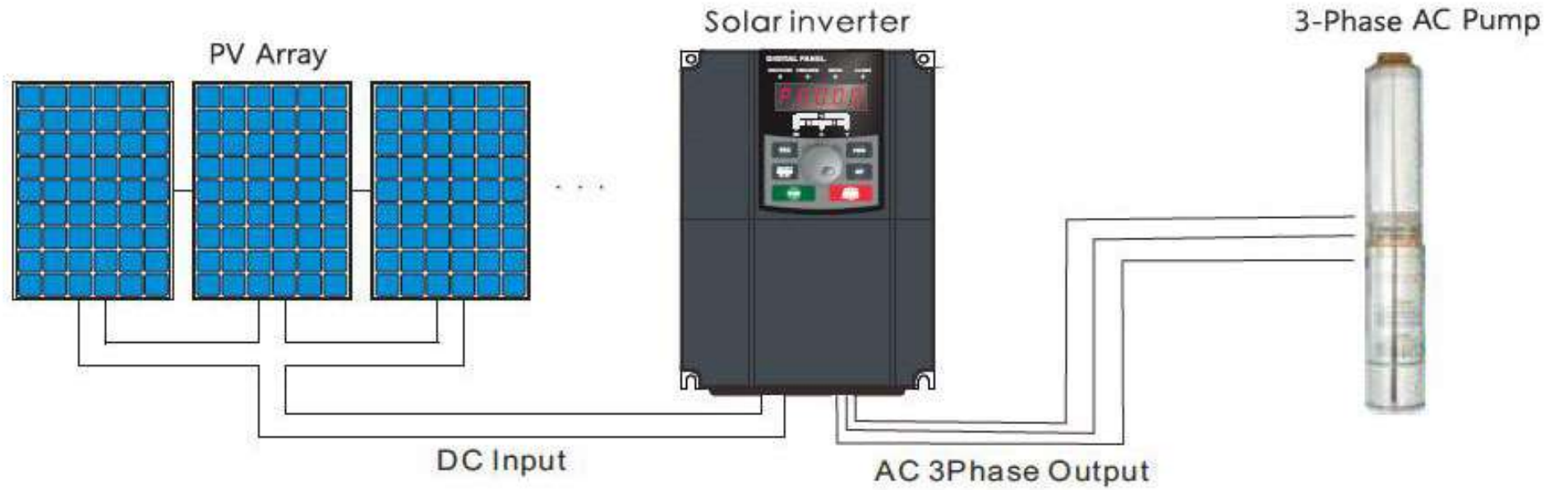


Work Sheet





APPLICATION

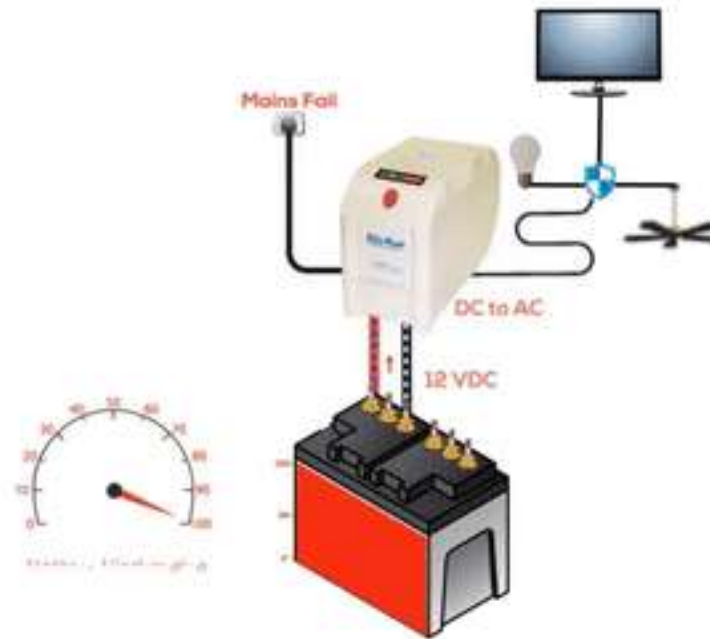




Intro- Inverter

Inverter is defined as an Electrical device which converts the Direct current source into the Alternating current source.

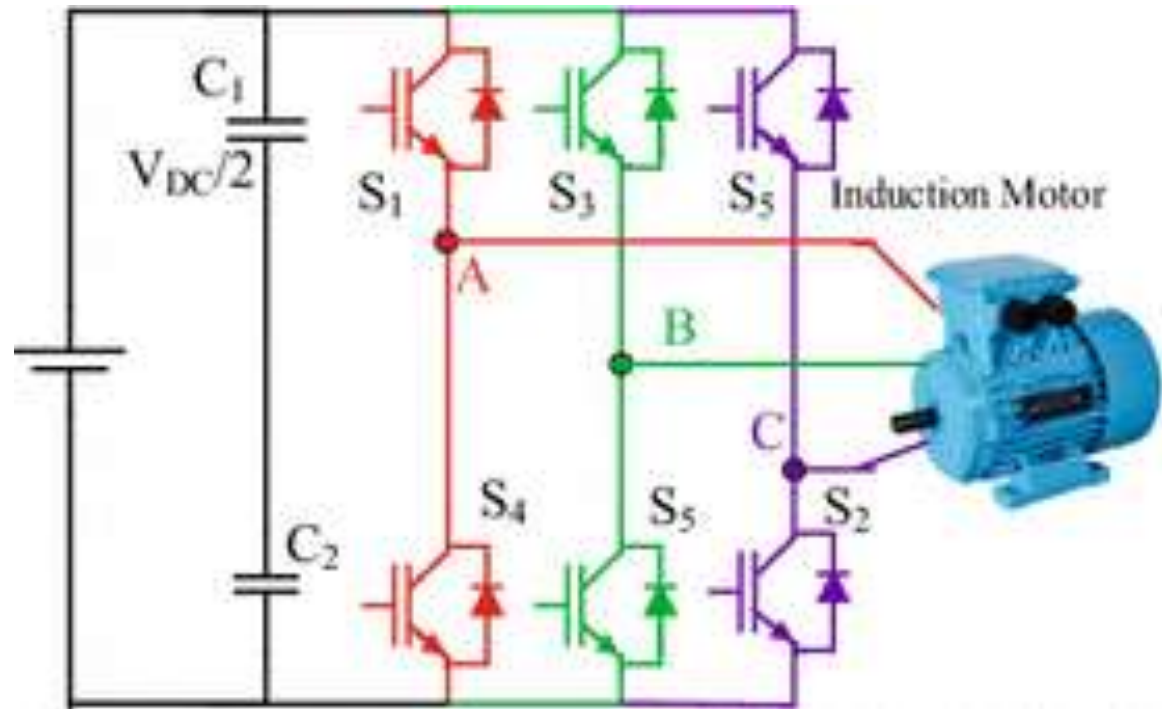
Basic Working of Inverter





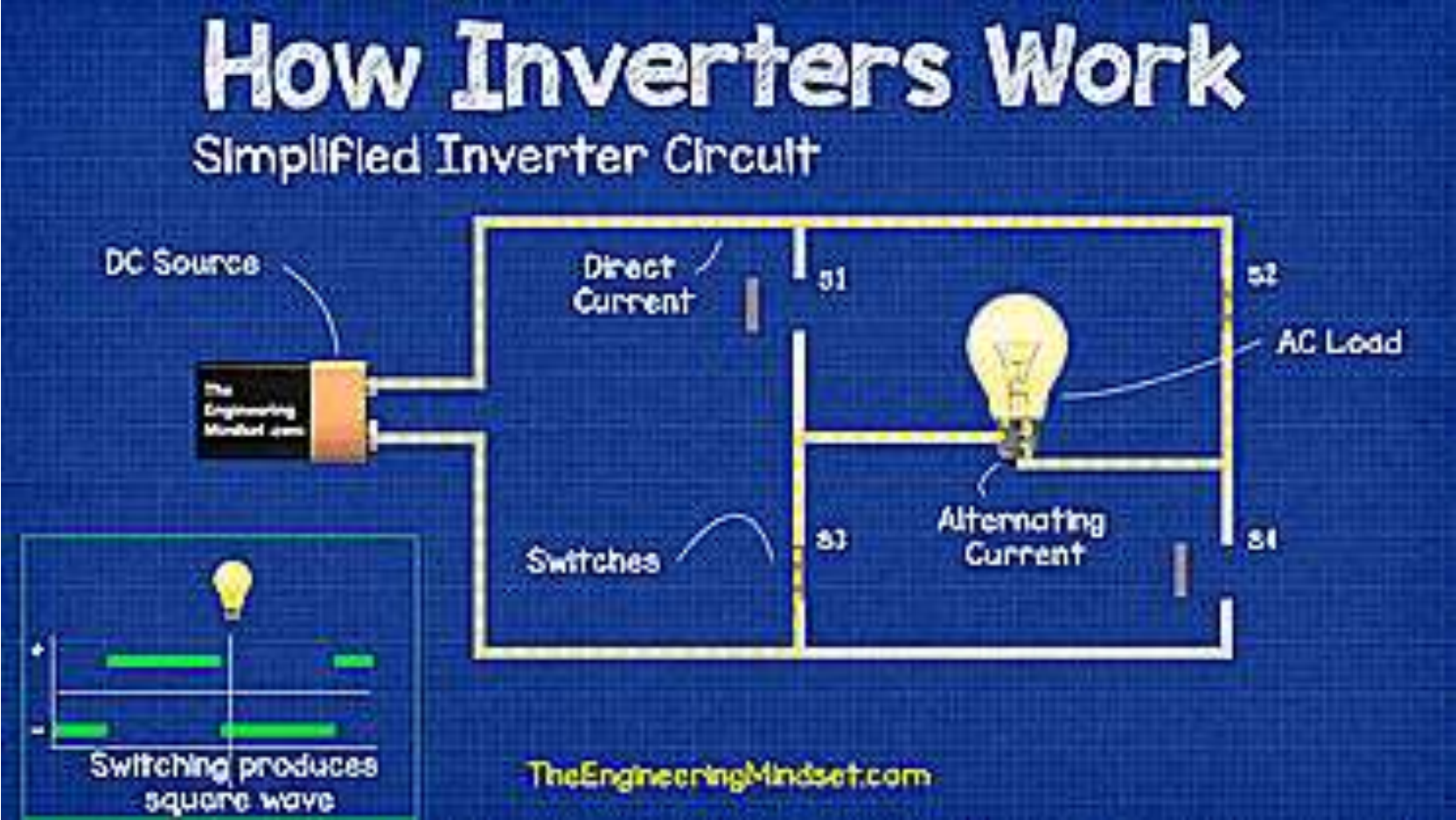
Intro-3 Phase Inverter

Direct current source into the Three phase Alternating current source.



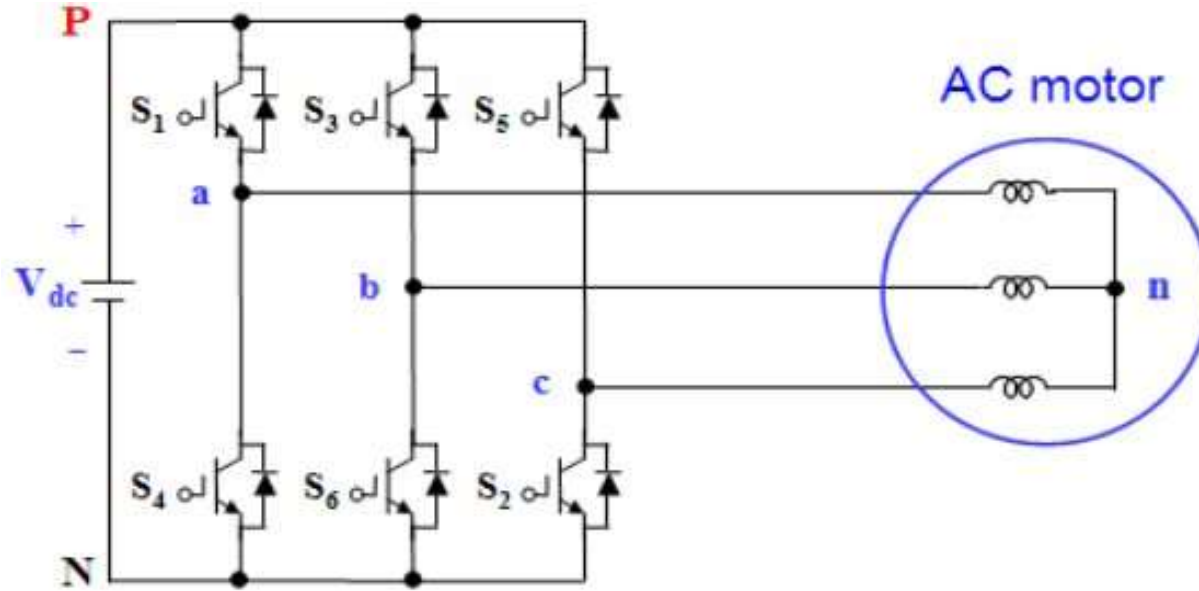


Inverter Switching Operation





Three phase Inverter-



6 SCR



controlled
converter

Input

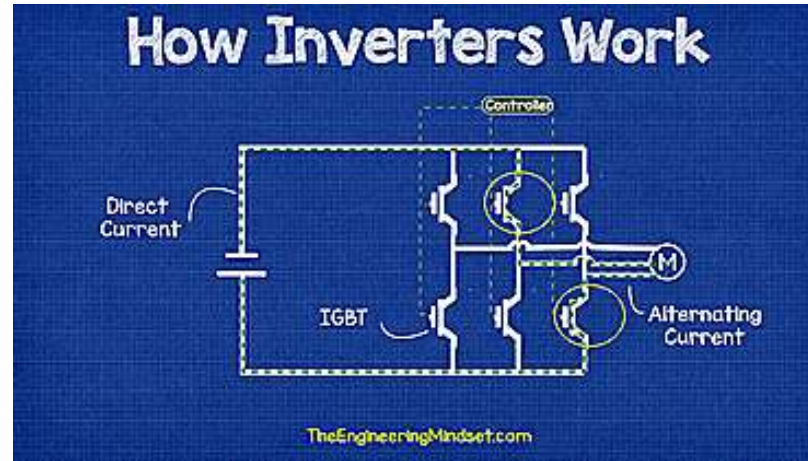


Uncontrolled
DC

Output

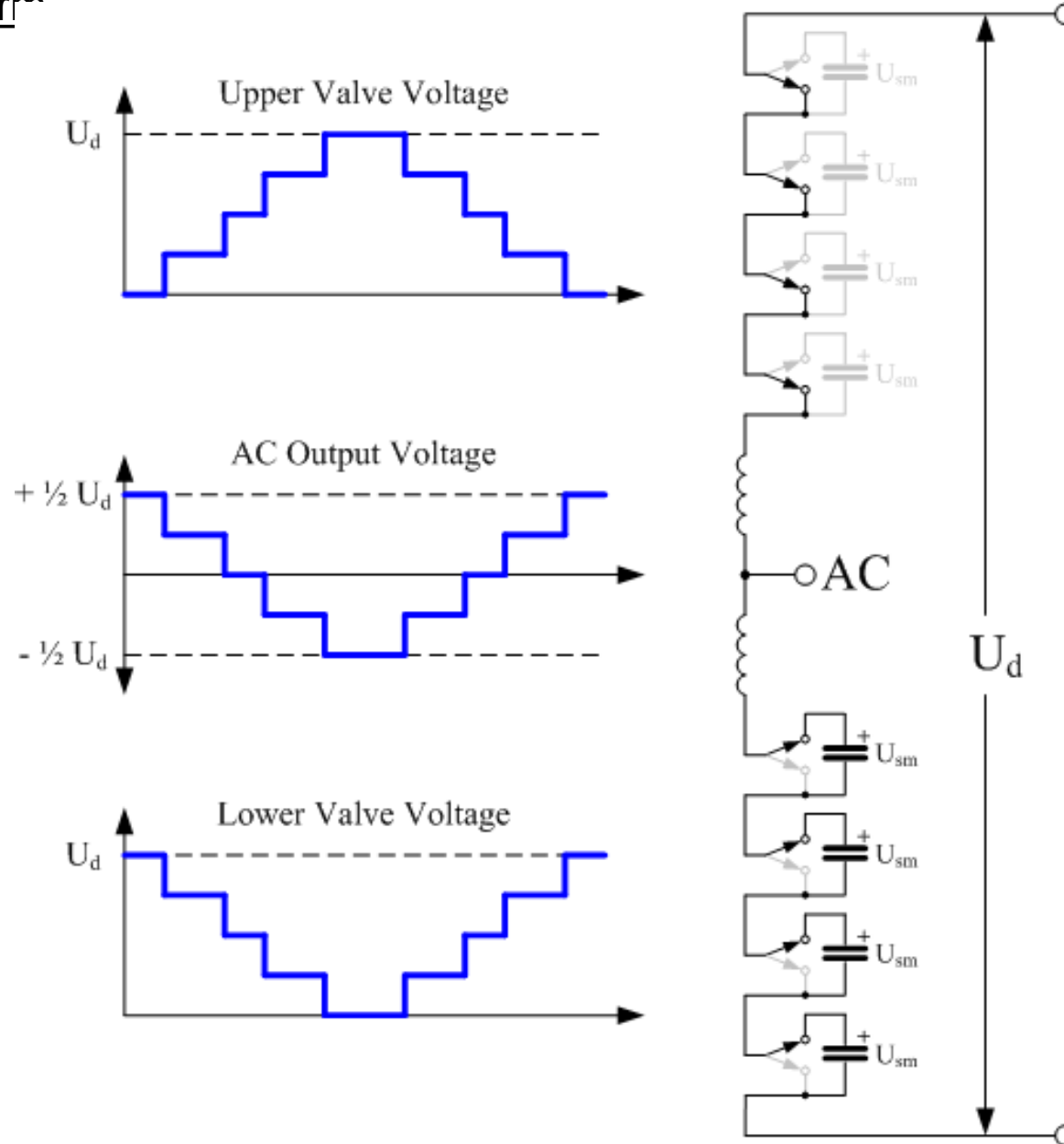


controlled AC



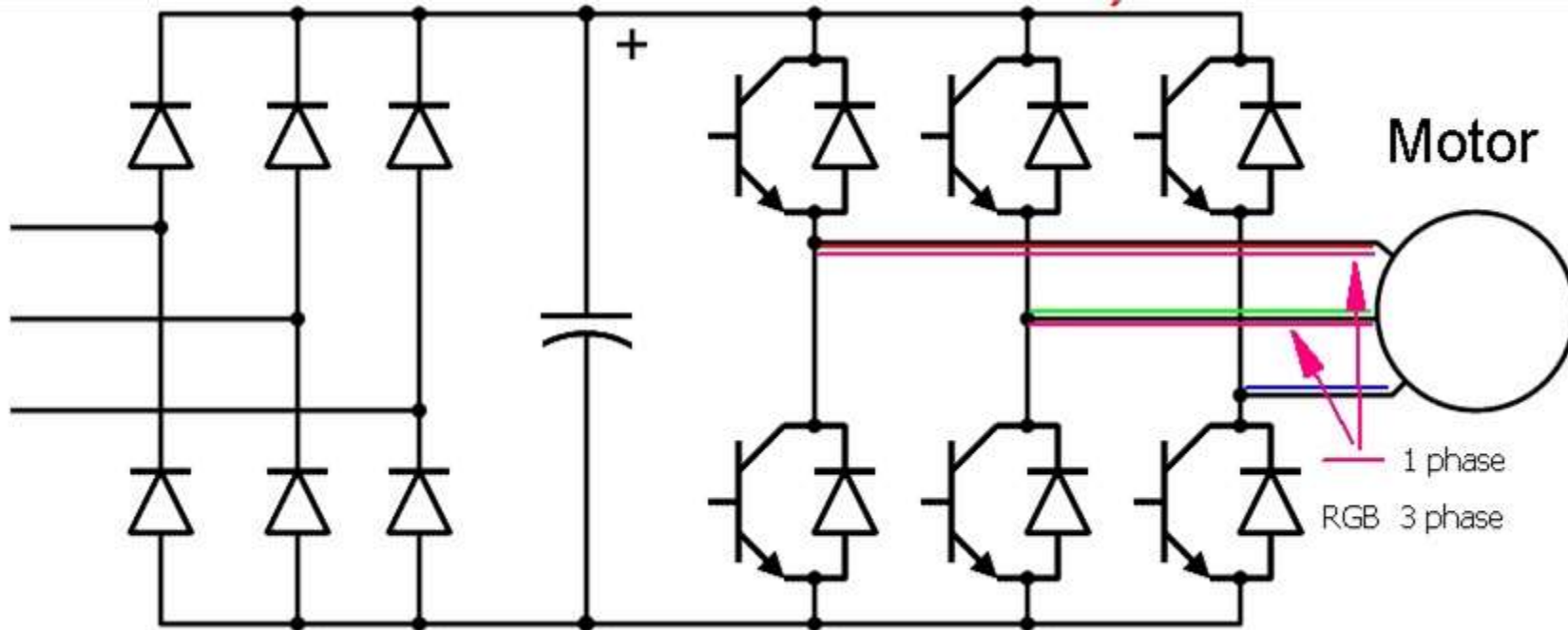


Three phase Inverter-Output Waveform





Assessment - Find the input and output of the given circuit ?





References

1. https://www.google.com/search?q=three+phase+inverter+puzzle&tbm=isch&ved=2ahUKEwiJ89aaxd3qAhVURSSKHRQhBHoQ2-cCegQIABAA&oq=three+phase+inverter+puzzle&gs_lcp=CgNpbWcQDDoECCMQJzoECAAQQzoFCAAQsQM6AggAOgYIABAIEB46BAgAEBhQt6QRWNrLEWCB7BFoAHAAeACAAfMBiAGtEJIBBjAuMTEuMpgBAKABAaoBC2d3cy13aXotaW1nwAEB&sclient=img&ei=dnMWX4ngKdSKrQGUwpDQBw&bih=608&biw=1349&rlz=1C1CHBF_enIN893IN893&hl=en&hl=en#imgsrc=SVrZMhV56UptWM
2. https://www.tutorialspoint.com/power_electronics/power_electronics_introduction.htm#:~:text=Power%20Electronics%20refers%20to%20the,efficiency%20and%20reliability%20is%2010%25.
3. <http://www.egr.unlv.edu/~eebag/EE-442-642%20Introduction%20F14.pdf>
4. <https://www.youtube.com/watch?v=djbJm-xWo2w>
5. <https://www.youtube.com/watch?v=jx5l2Fbil8U>

