

CHARGE CURVE FOR VEHICLES AND CHARGERS

EXPERIENCED GATHERED FROM PUBLIC CHARGERS
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AGENDA

- Introduction
- Scania charging curve
- Tests on public chargers
- Summary

INTRODUCTION

- Goods delivered at the correct time in the transport industry is very important
 - needs to be consistent without any delays, every day
- Charging of trucks has to be done during legal break of 45 min
 - maximum power is needed through the whole session
 - can be longer, a full charge at 500A with CCS2 is up to 100 min
- Truck uses CCS2 inlet, max charging speed 375kW
 - In future MCS will be standard for trucks



SCANIA CHARGING CURVE

- Battery net/gross up to 604/728 kWh
- Vehicle always tries to maintain optimum conditions for consistent charging curves
- This is what our customer expects
- up to 375kW



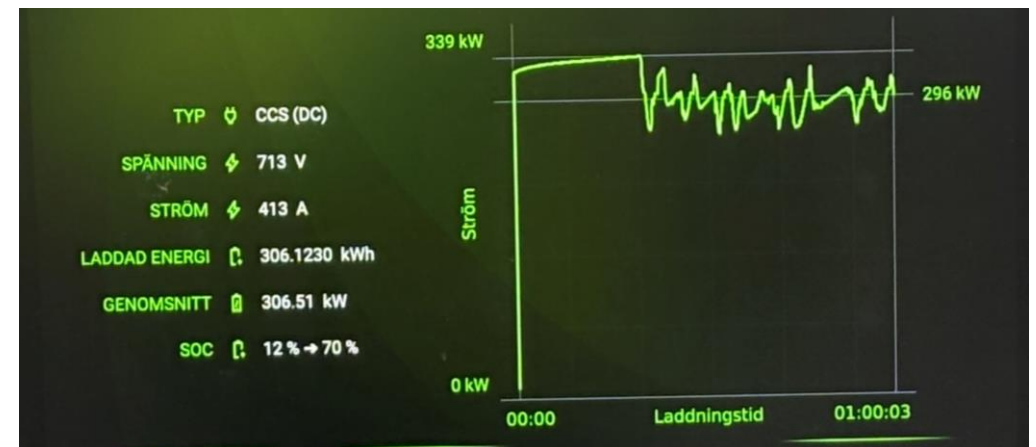
PUBLIC CHARGING EXPERIENCE



Power rated on charger



Actual power during test

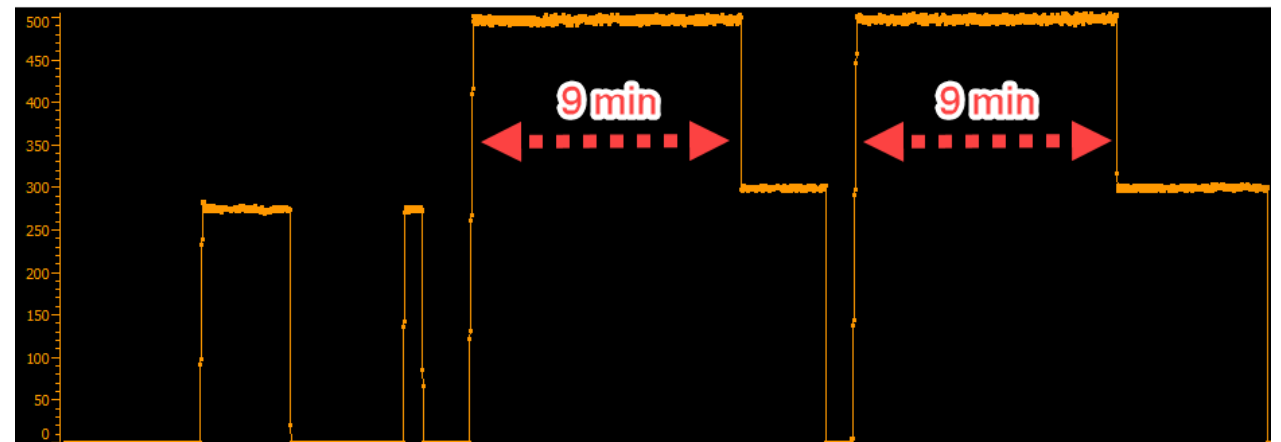


PUBLIC CHARGING EXPERIENCE



Actual power during test

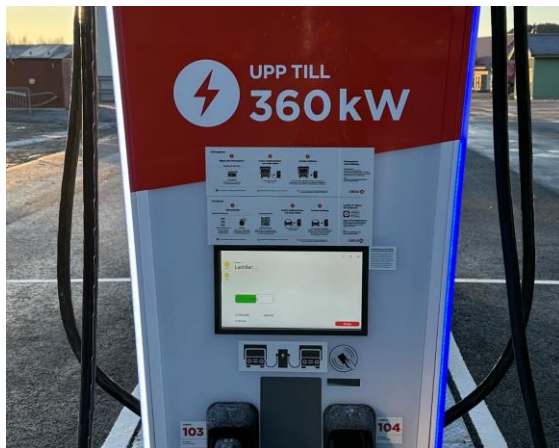
Power rated on charger



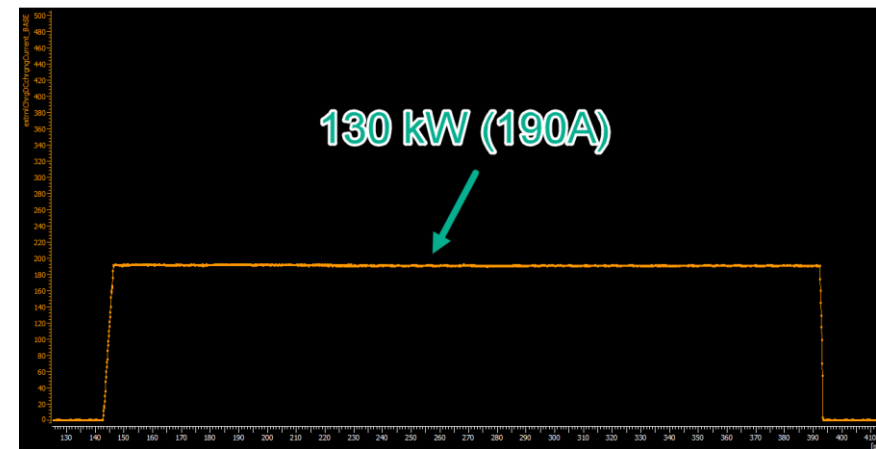
CHARGING SITE HAS TOO LOW INCOMING POWER



Power rated on charger



Actual power during test



SUMMARY - CHARGE CURVE FOR CHARGERS

—In addition to charge curve stated for vehicles, also a charge curve for the specific charger mounted on a site shall be displayed.

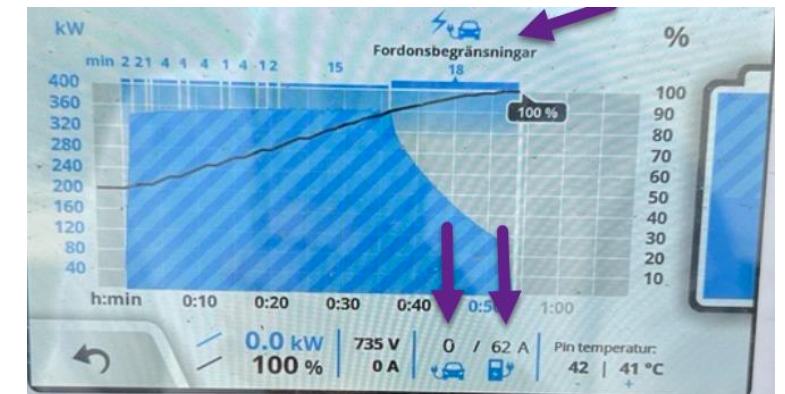
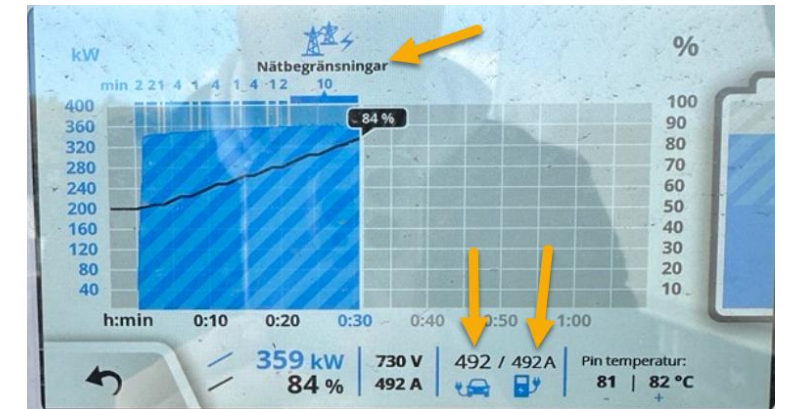
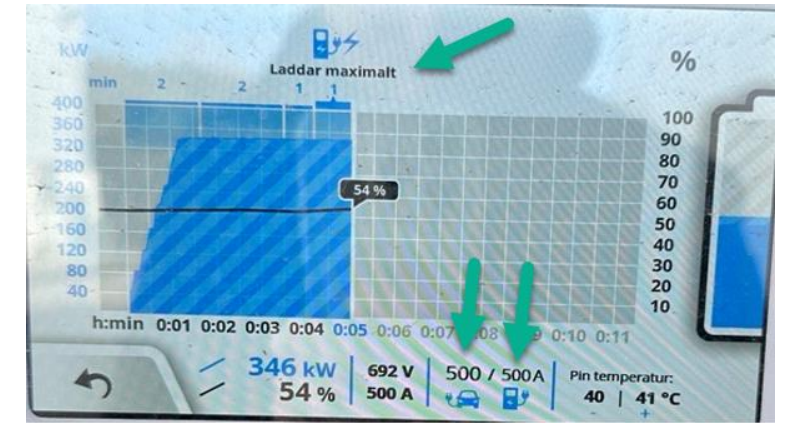
Taken into account limitations by the whole charging system:

- connector
- cable
- charger
- electrical grid

—The charger should display what is the limiting factor

- Vehicle
- Charger

—How do CPO's conduct maintenance to guarantee promised performance?



THANK YOU!

